CIIL Phonetic Reader Series—12

MANIPURI PHONETIC READER

INDER SINGH

CENTRAL INSTITUTE OF INDIAN LANGUAGES
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MANIPURI PHONETIC READER

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PHONETIC READER SERIES–12

Editor

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FOREWORD

The Central Institute of Indian Languages was set up on the 17th July, 1969 with a view to assisting and co–ordinating the development of Indian languages. The Institute was charged with the responsibility of serving as a nucleus to bring tegether all the research and literary out-put from the various linguistic streams to a common head and narrowing the gap between basic research and developmental research in the fields of languages and linguistics in India.

The Institute and its four regional centres are thus engaged in research and teaching which lead to the publication of a wide-ranging variety of materials. Preparation of materials designed for teaching/learning at different levels and suited to specific needs is one of the ma jor areas of interest of the Institute. Basic research relating to the acquisition of language and study of language in its manifold psycho-social relations constitute another broad range of its interest. The publications will include materials produced by the members of the staff of the Central Institute of Indian Languages and its Regional Language Centres and associated scholars from universities and institutions, both Indian and foreign.

The Central Institute of Indian Languages has initiated the *Phonetic Reader Series* in Indian languages with a veiw to presenting the range of phonetic variation obtaining in this sub-continent and demonstrating the closeness of language on the basis of phonetic patterning. These Readers are biased towards learning the sound systems of languages. Thus it is hoped that this series will be of interest to both scholars who are interested in phonetic studies and practical learners of languages who wish to make a beginning in their language study.

If these materials help solving the problems in the State and help in understanding the people speaking the language, then our efforts will have been amply rewarded.

Debi Prasanna Pattanayak

Director

PREFACE

The Census of India 1961 enumerates 1652 mothertongues in the country Besides the languages listed in the Eighth Schedule of the Indian Constitution there are some languages with substantial number of speakers. Some such languages have a long literary tradition, and creative works have been produced in them for centuries. Manipuri, a language belonging to the Kuki-Chin group of the Tibeto-Chinese sub-family, is such a language. It has borrowed extensively over the centuries from the neighbouring languages, mainly Indo-Aryan languages, due to geographical, historical and cultural reasons Manipuri is spoken in the eastern part of the country by 621244 speakers. Majority of the Manipuri speakers (502832 persons) are in the Manipur State. Rest of the speakers are spread primarily in Assam (89034 persons) and in Tripura (27940 persons). Manipuri (also called Meithei) is at present the a state language of Manipur and is used in education, administration and other spheres of life in Manipur. It is used as medium of instruction at the school stage and is also allowed as an optional medium for college education. It is also a subject of study at the college and university stage in Manipur and in some other universities in eastern India. In spite of all this a comprehensive synchronic study of the language along modern linguistic lines is still not available.

The Central Institute of Indian Languages under its tribal and border languages research programme has undertaken a study of Manipuri language in all its aspects. It is visualised to publish a synchronic grammar, a trilingual dictionary and instructional materials for Manipuri besides the present Phonetic Reader.

The present *Manipuri Phonetic Reader* describes the Manipuri sounds for two types of audience :

1. The language teacher and the educated adult learner.
2. The linguist.

Taking into consideration the dual purpose of the Phonetic Reader an effort has been made to present the sound system of Manipuri with as little terminological complexity as possible while not sacrificing sufficient and accurate information of Manipuri sounds. The Phonetic Reader in its introduction gives a general description of the structure of the Reader.

In the first chapter a general introduction of the speech organs together with a sagittal section of the speech tract is given. This chapter also gives a brief account of the classification and production of speech sounds.

The second chapter gives a classification and description of Manipuri speech sounds. It presents first the tonal features and then segmental sounds. The description of these sounds singly and in clusters is also given.

The third chapter gives an analysis of Manipuri phonemes. It briefly introduces the relevant concepts and discusses some problems of phonemic analysis of Manipuri like free variation, nasalisation, etc. It is followed by a description of the allophones of the phonemes and their distributions. The second part of this chapter gives an account of the present Manipuri writing system which is an adoption of the Bengali writing system. Certain deficiencies in the present day writing system have been pointed out and suggestions for modfications thereto are also given.

The last chapter gives phonetic drills for inculcating and practising the correct pronunciation of Manipuri.

The Phonetic Reader does not claim to be complete or perfect. There are certain areas still left untouched. Thus there is no description of the intonational features in the Phonetic Reader. Although it is true that the pronunciation of a language can be more effectively learnt with the aid of the native speaking teacher the usefulness of a Reader like the present one cannot be underestimated. It is hoped that the Reader will be useful to learners and teachers of Manipuri alike and also to interested linguistic scholars working on Manipuri.

B. G. MISRA

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INTRODUCTION

The present phonetic reader aims to describe scientifically but in simple terms the pronunciation of Manipuri speech sounds. Although it does not claim to be an exhaustive study of Manipuri speech sounds with all minute details, yet it describes the sounds of Manipuri in such a manner that the reader may become fairly familiar with them and may be able to pronounce them correctly with a native-like proficiency. The author has in mind the language learners as well as the language teachers of Manipuri, who find it difficult to understand how a particular sound is to be produced and described to the learners and thus feel the need of a scientific description of various speech sounds of Manipuri.

Manipuri sounds are described in fairly simple terms without using terminological complexity. The sounds which may be unfamiliar to the learners or difficult for the teachers from the instructional point of view are specially singled out and emphaized while giving phonetic drills for practice.

Although terminological usage is kept at minimum, the sounds in this phonetic reader are described according to conventions of phonetics, *i.e.*, first of all the various movements of speech organs in the oral cavity are explained and then the movements of the rest of the vocal organs. The description of each sound consists of the following details :

a) The phonetic definition of the sound.

b) The movements of speech organs during the production of a particular sonnd.

c) The distribution of the sound.

d) Examples based on the distribution.

e) Notes and instructions for the learners as well as teachers wherever necessary.

Additional phonetic drills are also given in Chapter Four for further practice.

A brief outline of Manipuri Phonology is given in Chapter Three. A note on adoption and adaptation of Manipuri Script is also given in the same chapter to cater to the needs of learners as well as teachers in this regard.

1. DESCRIPTION OF SPEECH ORGANS AND THE PRODUCTION OF SPEECH SOUNDS

When a learner learns a new language

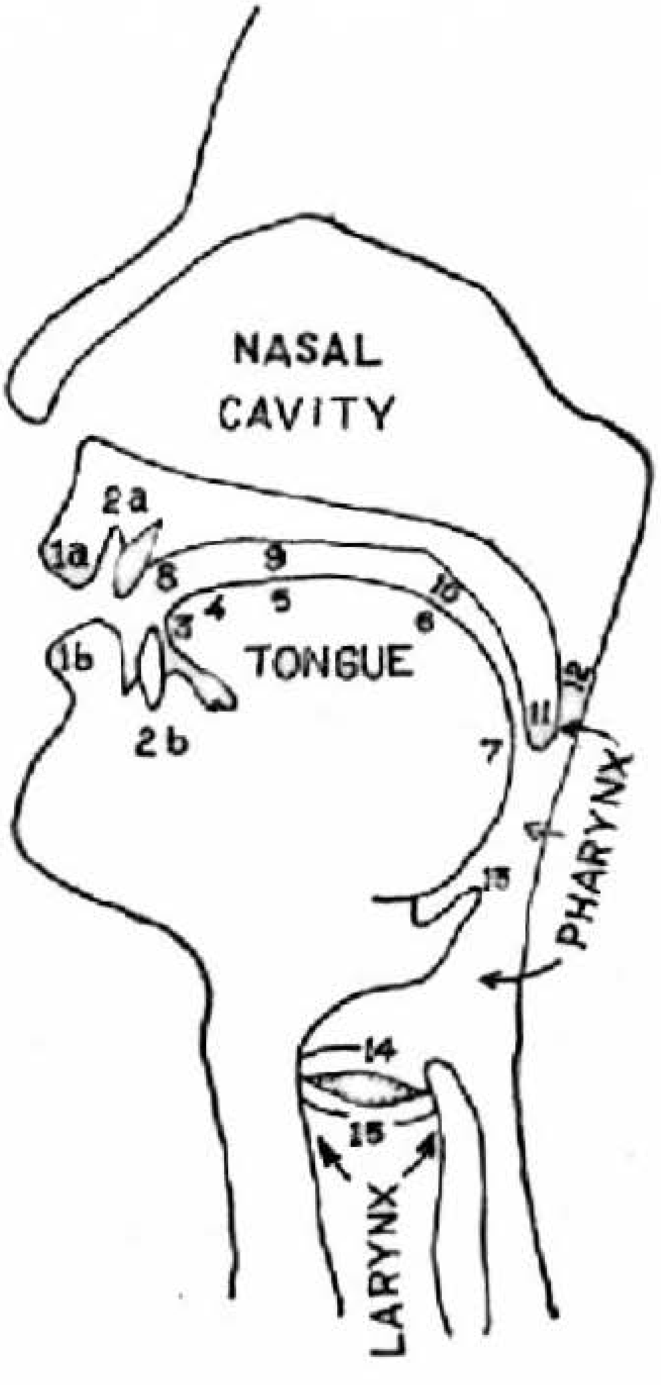
(1) he has to recognise all the sounds uttered and

(2) he should be able to produce them to the satisfaction of the native speakers of that language.

The basic knowledge of speech organs and their functioning in the formation of speech sounds with specific reference to Manipuri speech sounds will help both the learner, and the teacher who finds it difficult to understand and explain how a particular sound is to be recognised and produced. It is interesting to note that phonation or production of speech sounds is a secondary function of these organs.

The whole set of ***Speech Organs*** can be classified into two kinds, *viz.*, **articulators** and **the points of articulation.** Articulators can be moved more or less freely and can thus be made to assume a variety of positions. The Points of Articulation are relatively less mobile and in some cases fixed points or areas lying above the articulators which these may touch or approach. The articulators as well as the points of articulation can be seen from the given sagittal section of speech tract as shown in the figure.

1a Upper lip
1b Lower lip
2a Upper teeth
2b Lower teeth
3 Tip of the ton
4 Blade of the tongue
5 Front of the tongue(also called middle or centre)
6 Back of the tongue (also called dorsum)
7 Root of the tongue
8 Alveolar ridge (also called teeth ridge)
9 Hard palate
10 Soft palate (also called velum)
11 Uvula
12 Velic
13 Epiglottis
14 Glottis
15 Vocal cords



The lower lip, the tip of the tongue, the blade of the tongue, the front of the tongue, the back of the tongue and the root of the tongue are the articulators.

The upper lip, the teeth ridge or alveolar ridge, hard palate and soft palate are the points of articulation.

The other organs involved in the production of speech sounds are the teeth, uvula, velic, pharynx, epiglottis, glottis, vocal cords and larynx.

The formation of speech sounds can be described by discussing briefly each of the articulators, mentioning their typical movements and positions, *i.e.*, manners and typical points of articulation.

Sounds are produced by human beings when the column of air is furnished by the lungs, from which it is expelled by controlled action of the diaphragm. As this air passes upward through the larynx and the pharynx, and then forward and out through the mouth or the nose or through both, its flow may be stopped, impeded or left relatively unobstructed at various points along the way. However, the shape of the chambers through which it passes may be variously modified.

LOWER LIP :

The ***lower lip*** may form a complete closure of the mouth or oral passage by being pressed firmly or loosely against the **Upper Lip**, as for [p] in [pát], [b] in [ba:bu], or [m] in [mɪt], etc. The two lips may be pursed and protruded to a certain degree forming a more or less roughly circular opening of various dimensions, as for [w] in [wá:ri], vowel [u] in [úkòp], [u:] in [ù:ba], etc.

The sounds articulated by the lower lip are called **Labial.** They may be ***Protruded*** (both the lips pursed and protruded) or ***Bilabial*** (lower lip pressed against the upper lip) or ***Labiodental*** (lower lip against the upper teeth). In Manipuri sounds are ***Bilabial*** with a certain dgeree of protrusion. For example, [p] as in [pá:ba], [pʰ] as in [pʰɪ], [b] as in [baná:n], [bʰ] as in [bʰa:ro:t], etc.

THE TONGUE :

The tongue is a highly mobile articulator and different part of it can be moved almost independently. For this reason it is useful to treat three sections of the tongue as separate articulators.

TIP OF THE TONGUE OR APEX :

The *Apex* can be raised to form a complete closure against the edge of the upper teeth or **Alveolar Ridge** as for [t] in [tàl], or [d] in [da:n], etc. Against the same point the apex can form a small groove-shaped aperture as for [s] as in [a:sa:] etc. It can form an occlusion in the median line of the mouth leaving a lateral opening as for [l] in [làm] etc. It can be curled back while touching or approaching the alveolar ridge as for [r] in [raŋ] etc.

The sounds articulated by the apex including the blade are called **Apical**. They may be *Dental* (apex forming a oclsure against the upper teeth) or *Alveolar* (apex forming a closure against the alveolar ridge) or *Retroflex* (apex in curled position forming a closure against the alveolar ridge). In Manipuri sounds are both *Alveolar* and *Retroflex* (to a certain degree). For example, [t] as in [tìn], [tʰ] as in [tʰabàk], [d] as in [da:ku], [dʰ] as in [dʰo:lo:k], [s] as in [sana:], [n] as in [náŋ], [l] as in [lìŋ], [r] as in [ra:g] or [parda:] and [ṭ] as in [ṭin], [ṛ] as in [paṛda:] etc.

FRONT OR CENTRE OF THE TONGUE :

The *front* usually articulates against the **Hard Palate.** It can form a complete closure against the hard palate which lies directly about it when the mouth is closed and the tongue relaxed. It can form a complete closure against the hard palate as for [c] in [cé:k], or [j] in [ja:m], etc, Against the same point the front can form a small groove-shaped aperture as for [š] in [šiŋ] etc. One of the most important functions of the front part of tongue, *i.e.*, anterior of front is to modify the shape of oral cavity in the articulation of semivowel [y] in [yá:ba] and vowels as for [i] in [inba], [i:] in [í:ba], [e] in [é:rám], etc.

The sounds formed with the front of the tongue are called **Frontal**. They may be ***Pre-palatal***, ***Medio-palatal*** and ***Post-palatal*** indicating that the front touches or approaches the anterior, the middle or the posterior part of the hard palate, respectively. In Manipuri, there are ***Pre-Palatal*** and ***Medio-Palatal*** sounds. For example, [i] as in [icé:], [i:] as in [mí:], [e:] as in [e:siya:] and [c] as in [cé:ŋ], [c^{h}] as in [c^{h}e:ni], [j] as in [jagó:i], [j^{h}] as in [j^{h}a:n], [š] as in [šé:n] and [y] as in [yá:], etc.

BACK OR DORSUM :

The ***Back of the Tongue*** extends from a point rear to the centre or front of the tongue to the root of the tongue. The part of the vocal tract which lies directly above the dorsum is called the **Soft Palate** or **Velum**. The **Uvula** is the small, fleshy pendant hanging from the posterior edge of the velum. The ***Velum*** acts as a flap or cover for the opening which leads to the nasal cavity. When the velum is raised, the opening is shut off, and the air stream is forced to flow entirely through the ***Oral Cavity***. When the velum is lowered, the air stream has access to the ***Nasal Cavity***.

The ***Dorsum*** can form an occlusion against some part of the velum as for [k] in [ká:ŋ], [g] in [guli], [ŋ] in [ŋá:] etc. It is possible to produce a constriction in the ***Pharynx*** (the cavity at the extreme back of the mouth between the entrance to the nasal cavity, *i.e.*, velic and the larynx) by retracting the lowest part of the dorsum often called the ***Root of the Tongue*** or simply by contracting the musculature of the pharynx itself. One of the important functions of the dorsum is to modify the shape of the oral cavity in the articulation of vowels as for [u] in [uná:], [u:] in [ú:ba and [o:] in [ó:ba] etc.

The sounds formed with the back of the tongue are called **Dorsal** or **Velar.** They may be ***Pre-Velar***, ***Medio-Velar*** and ***Post-Velar***. In Manipuri, there are ***Medio-Velar*** and ***Post-Velar*** sounds. For example, [k] as in [kà:ŋ], [kʰ] as in [kʰá:] [g] as in [gada:], [gʰ] as in [gʰi:] and [ŋ] as in [ŋas] etc.

PHARYNX :

Sounds articulated in the pharynx are called ***Pharyngal.***

LARYNX :

All the air expelled from the lungs or drawn into them must pass through the larynx — a complex structure of cartilage, muscles and membranes at the top of the wind-pipe.

VOCAL CORDS :

The most interesting parts of larynx are the two parallel transverse banks or bands of muscle extending from front to back. These are known as vocal cords even though there is nothing cord-like about these muscles.

GLOTTIS :

The space between the vocal cords is called the glottis. For ordinary breathing the glottis remains open.

The vocal cords are capable of extremely delicate adjustment. The *Glottis* can be narrowed, reduced to a slit or closed entirely. When it is only slightly narrowed, the air current is hardly impeded. This is the position usually assumed for the [h] in [hàŋ], [hi] etc. When it is closed, the air current is completely stoppped, and no air can flow into or out of the lungs until the closure is released as in the production of [ʔ] in [làːʔu] etc.

Sounds formed in this region are called **Faucal**. They may be *Pharyngal*, *Glottal* or *Laryngal*. In Manipuri, these are only *Glottal* sounds as [ʔ] in [càlluʔi], and [h] in [hɪk], etc.

When the glottis is nearly but not quite closed, the passing air current sets the elastic edges of the vocal cords into rapid vibration which produces the sounds technically known as **Voiced** sounds. Any sound except glottal stop [ʔ] can be pronounced both with or without voice, *i.e.*, with and without the concomittant vibration of vocal cords.

Those sounds in the production of which the air stream is first stopped completely at some point or the other and then released with a strong puff of air, are known as **Aspirated** sounds. If this puff of air is not released then the sounds thus produced are called **Unaspirated** sounds. For example, in Manipuri [pʰ] as in [pʰɪjòːn], [bʰ] in [bʰaːb], [tʰ] in [tʰámba], [dʰ] in [dʰarma], [cʰ] in [cʰaːtra], [jʰ] in [jʰaːl], [kʰ] in [kʰànba] and [gʰ] in [gʰari] are aspirated sounds.

On the basis of **Manner of Articalation** the speech sounds are classified as—*Stops*, *Affricates*, *Spirants* or *Fricatives*, *Nasals*, *Laterals*, *Trills* and *Semivowels* known as *Consonants*, *Vowels* and *Tones*.

STOPS

Stop sounds are produced by stopping the air current completely at some point by closing the passage through which it flows and then releasing it abruptly with a certain degree of explosion howsoever minimal in some cases. In Manipuri, for example, stop sounds are both *Voiceless* and *Voiced, Unaspirates* and *Aspirates, i.e.*, [p, t, ʈ, k; p^h, t^h, k^h; b, d, g; b^h, d^h and g^h].

AFFRICATES :

Affricate sounds are produced by stopping the air stream completely at some point by closing the passage through which it flows and then releasing it slowly allowing the air stream to squeeze through a narrow aperture causing a certain degree of friction. In Manipuri, such sounds are both *Voiceless, Voiced* and *Unaspirates, Aspirates, e.g.*, [c, j ; and c^h, j^h].

SPIRANTS OR FRICATIVES :

These sounds are produced by narrowing the air passage upto the point of constriction at some point so as to leave only a narrow aperture, shaped either like a slit or like a groove, for the air current to squeeze through causing a certain degree of friction. In Manipuri, for example, the *Grooved Spirants* are of *Voiceless* nature, *i.e.*, [s, š and h].

NASALS :

Nasal sounds are produced by closing the oral cavity at some point as for the stops and then the air stream is allowed to pass through the nasal cavity by lowering the soft palate. In Manipuri nasal sounds are *Voiced, e.g.*, [m, n and ŋ].

LATERALS :

These sounds are produced by closing the median line of the oral cavity at some point along the centre, but leaving a free passage for the air stream to flow out on both sides of the obstructed point. In Manipuri, there is only one *Voiced Lateral* sound, *i.e.*, [l].

TRILLS :

Trills are produced when the passing of the air current causes the raised tip of the tongue to vibrate rapidly or to flap it against some point of articulation. In Manipuri there is a *Voiced Trill* sound [r] and a Flap sound [ɾ].

SEMI-VOWELS :

Semi–Vowels are produced by a rapid glide of the airculatory organs to or from the relatively unobstructed position of tongue in a modified oral cavity both by the position of lips and the lower jaw as the case may be. In Manipuri, for example, sounds of this kind are *Bilabical Semivowel* [w, u̯] and *Mediopalatal Semivowel* [y, j].

CONSONANTS :

In the production of *Consonants* the air current is completely stopped by an occlusion of the larynx, or the oral passage, or the nasal passage or is forced to squeeze through a narrow aperture, or is deflected from the median line of its channel through a lateral opening or causes one of the supraglottal organs to vibrate or the release is made with or without a strong puff of air or explosion, as the case may be.

VOWELS :

In the production of *Vowels* the air passage is left relatively unobstructed but the shape of oral cavity is modified by various movements of the tongue, the lower jaw and the lips. The position of the tongue as well as lower jaw and the shape of lips determine the final shape of oral cavity and thus the quality of vowels. In Manipuri the *Vowel* sounds are [i, i:, e:, a, a:, o:, u, u:].

TONES :

Sounds [vowels] produced with a relative but contrastive pitch intensity by the varying tenseness and vibration of vocal cords are known as having different registers in the form of *Contours,* their combinations and overlapings. Thus, the pitch accent occurs concurrently with the vowel sounds and therefore, it is a dependent realization. However lexically significant pitch differences are called *Tonemes* and the language a *Tone Language.* In Manipuri for example, there are three contrasting *Tonemes i.e.,* falling, rising and level.

SEGMENTAL AND SUPRA SEGMENTAL SOUNDS :

Speech sounds so formed can be divided broadly into two major catagories, viz., *Segmental* and *Suprasegmental* sounds. A sound caused by the movement of a single articulator or the synchronous movement of several articulators may be called a *Segmental sound.* The segmental sounds can be further subdivided into *Consonants* and *Vowels.* The *Stops, Affricates, Spirants, Nasals, Laterals, Trills* and *Semi-Vowels* are known as *Consonants.* Other sounds are *Vowels.* The *Suprasegmental sounds* are those sounds which occur over stretches of segmental units in a syllable basically over the obligatory segment that is a vowel. Suprasegmental sounds can be classified in *Tone, Stress* and *Intonation.*

Various criteria which are considered in the description and classification of vowels and consonants are as follows.

The classification of *Vowels* is based on the following criteria :

a) The part of the tongue that is raised

b) The height to which the tongue is raised or the lower jaw is raised or lowered.

c) The shape of the lips.

PART OF THE TONGUE :

Depending upon the portion of tongue that is involved in the production of vowel sounds they are called **Front, Back** and **Central**—which is neither front nor back. In Manipuri *Front* vowels are [i, i:, e:] and *Back* [u, u:, o:]; Vowels [a, a:] are in between Central and Back.

HEIGHT OF THE TONGUE :

Depending on the height to which the tongue is raised or the lower jaw is raised or lowered the vowel sounds are called **High, Lower–High, Higher-Mid, Mid, Lower-Mid, Higher-Low, and Low.** In Manipuri vowel sounds are *High* [i, i:, u, u:] *Higher-Mid* [e:, o:] and Higher *Low* [a, a:].

SHAPE OF LIPS :

Depending upon the rounding or non-rounding of the lips involved in the production of vowel sounds the vowels are either **Rounded** or **Unrounded**. In Manipuri *Rounded* vowel sounds are [u, u:, o:] and *Unrounded* [i, i:, e:, a, a:].

The classification of *Consonants* as stops etc. labial etc., voiced/voiceless, aspirates/unaspirates is based on the following criteria :

a) the articulators involved
b) the points of articulation
c) the manner of articulation
d) the position of soft palate
e) the state of vocal cords

Apart from the above said criteria the following facts are also essential to note.

Sounds produced with speech organs in a tense position are known as **Tense** sounds; but when the speech organs are in a lax position the sounds are called **Lax**. In Manipuri for example, sounds are both *Tense* [iː, uː, eː, oː, aː] and *Lax* [i, u, a].

Sounds produced with a longer duration are known as **Long** otherwise **Short**. In Manipuri for example, the sounds are both *Long* (all the tense sounds mentioned above) and *Short* (all the lax sounds mentioned above).

Teachers of Manipuri Language may have to make use of approximate visual representation of the speech organs both of articulators as well as the points of articulation during the demonstration and illustration of the production of any required speech sound of the language. It is advised to resort to this only if oral explanation as well as demonstration needs further supplementation, since such representations in the absence of X-Ray photography can be only gross approximations and abstractions, therefore, of not much scientific value. The figure used in the illustration of speech organs may be modified if necessary and used accordingly.

Similarily the nature, the relative duration, the increase or decrease in loudness etc. of tonemes also could be represented by the directional strokes of certain length representing the nature and duration while the relative thickness may depict the loudness. The average range of Manipuri speaker's voice thus may be divided into five equal intervals of high and low as the too extremities and mid, higher-mid and lower-mid as the intermediate intervals. Then the tonemes may be represented by stating th ir starting as well as ending pitch levels. If one uses a short vertical line as the reference line or ordinate and plots a simplified graph to its left with time as abscissa and pitch as ordinate one can get a generalised and schematized representation of illustrative nature of the required toneme.

2. CLASSIFICATION AND DESCRIPTION OF MANIPURI SPEECH SOUNDS

Manipuri speech sounds are classified into two major catagories, viz., *Suprasegmental* and *Segmental* sounds.

Suprasegmental sounds can be further classified into *Tones Stress* and *Intonation*. *Tones* are the only suprasegmentals which are discussed in this Reader. The domain of **Tones** are syllables in Manipuri. However these tones modify the syllable peak, i.e., the vowel.

Segmental sounds can be further subdivided into *Vowels* and *Consonants*. In Manipuri there are three tones, eight vowels and thirtyone consonantal sounds. *However all these sounds* are not *Phonemes* of Manipuri Language. Some of these sounds are allophones of a phoneme. **Phoneme** may be understood as 'a class of phonetically similar sounds contrasting and mutually exclusive with all similar classes in the language.' On the other hand 'The individual sounds which compose a phoneme are its **Allophones.**'

In this Reader the discription of Manipuri speech sounds is illustrated with examples where the occurrence of these sounds are presented in items in terms of their being *initial*, *medial* and *final*. This can also be illustrated within the *syllabic* domains since the syllable is an essential level in this description due to the very nature of the language.

Syllables are for that matter both *Open* and *Close*. Open syllables have a vowel as the final element. Such syllables are as V in [ì:], CV in [tá:] and CCV in [dra:ma:] etc, while the close syllables have a consonant as the final element. Such syllables are as VC in [é:k], VCC in [unn], CVC in [imà:], CVCC in [te:ŋk] and CCVC in [dram] etc.

In the syllabic structure of Manipuri, a single consonant occurring in the inter vocalic position in a polysyllabic item goes with the following syllable as [c] with [e:] in [ice:] i.e., [i-cé:] or [m] with [a:] in [imà:] i.e., [i-mà:] etc When clusters of two or more consonants occur in the said position the first consonant goes with the preceeding vowel while the rest goes with the following vowel as in [cìt-pa] and [càm-pra:] etc. Thus, the knowledge of syllabic structure will help the learner in learning consonant clustering etc. in a better way. Description of Manipuri speech sounds follows.

I SUPRASEGMENTALS

TONES :

Vowels and *Consonants* are defined in terms of their *Point* and *Manner of articulation*. But the same parameters do not define tones. One can roughly say that the 'tone is a psychological impression obtained from the physical frequency of sounds'. Also, 'while comparing different tonal sounds one can understand that one item is different from the other within a functional unit.'

Manipuri language may be described as a language with a contrastive pitch on each syllable, contributing towards the inherent lexical structure just as consonants and vowels do. For example, in Manipuri [kʰɔ̀:ŋ] means 'leg' and [kʰɔ́:ŋ] means 'canal'. Here the first word carries a *falling tone* while the second word a *rising tone*. But for the tonal contrast these words would be homophonous. Also consider [kʰɔ̄:m] which carries a level tone. It is the relative pitch level in these words which is significant for the learner of this language.

As stated earlier Manipuri language shows a three way tonal contrast. i.e., *falling*, *raising* and *level*. If the average range of the Manipuri speaker's voice is divided into several levels between the extremities of *high* and *low*, these tones can be represented by stating their approximate starting as well as ending pitch levels. It is convenient here to have *mid*, *higher-mid* and *lower-mid* levels of pitch as the intermediate levels of reference. However these distinctions are abstractions. They are necessary to generalize and schematize the description to a considerable degree and are of a merely illustrative nature. The exact qualitative as well as quantitative nature of tones may be acquired by listening and imitiating the native speaker or the relevant taped meterial as the case may be.

FALLING TONE :

Falling tone, marked as [ˋ] [kʰɔ̀:ŋ] 'leg' has a *falling pitch contour* starting almost at the upper ⅔ limit of the *higher-mid range* and reaching the lower two third of the *low-range* at the end. The *loudness* falls sharply towards the end of the vowel and the *duration* is far below average.

ì:	'blood'
àt	'ash'
àŋ	'yes'
nàŋ	'you'
màŋ	'dream'

ità:	'female friend'
imà:	'mother'
ahìŋ	'night'
ahàm	'three'
kàtpa	'to offer, offerings'
càtpa	'to go, gait'

RISING TONE :

Rising tone marked as [́] in [kʰó:ŋ] 'canal' has a ***rising pitch contour*** starting at about the middle of the ***lower-mid range*** and reaching almost the top limit of the ***high range*** at the end. The ***loudness*** rises towards the end of the vowel and the ***duration*** is slightly below average.

ú	'tree'
ó:k	'pig'
ó:i̯	'left'
tá:	'spear'
yá:	'tooth'
kʰún	'village'
ipá:	'father'
iwá:	'husband'
amó:m	'female'
adó:m	'you' (hon.)
a:há:ŋba	'empty'
a:há:nba	'first'

LEVEL TONE :

Level tone left unmarked as in [kʰo:m] (however it may be marked as [ˉ] e.g., [kʰō:m], has an almost ***level contour*** of pitch which is positioned in the ***mid of the pitch range*** of the speaker's voice. The ***loudness*** of the respective vowel sound remains the same throughout and the *duration* of the syllable with this tone is between an average and slightly above average duration.

i	'thatch'
u:t	'camel'
to:p	'gun'
co:k	'chalk'
gʰi:	'refined butter'
gi	'of (possessive marker)'
a:sa:	'hope'
alla:	'Allah'
sabʰa:	'legislature, assembly'
ritu	'season'
dʰo:lo:k	'big drum'
to:lo:b	'salary'

II SEGMENTALS :

VOWELS :

The classification and formation of *Vowel* sounds of Manipuri language is done on the same criteria as described in Chapter one. In this chapter the individual vowel sounds are now being described. Four overall characteristics of vowel sounds will not be repeated here. These characteristics are : (1) the *vowel sounds* are *oral* meaning thereby, that the soft palate remains raised to close the nasal passage and the air current flows through the modified oral cavity (2) the *vowel sounds* are *voiced*, meaning thereby that the vocal cords remain vibrating in the production of these speech sounds. (3) the *oral cavity* may also be modified by *raising* or *lowering* the *lower jaw* along with the *tongue position* while producing vowel sounds, and (4) all the vowel sounds occur in all the positions i.e., initial, medial and final.

[i] HIGH FRONT UNROUNDED SHORT VOWEL.

In the production of this sound the front part of the tongue is raised towards the anterior of the hard palate as high as possible. (but without raising the tip of the tongue) in the production of vowel sounds However it does not touch the hard palate or forms any kind of aperture to cause any friction. The lips remain spread to a certain degree modifying the oral cavity. Speech organs on the whole are remaining relatively lax.

INITIAL

i	'thatch'
iné:	'mother's-brother's wife'
icé:	'elder sister'
ità:	'female friend'
imà:	'mother'

MEDIAL

tin	'spitton'
ahi	'night'
risi	'saint'
tìn	'insect'
ši	'fuel'

FINAL

ti	'testicles'
p^hí	'cloth'
cahí	'age'
kayí	'tiger'
yá:ri	'gum'

[i:] HIGH FRONT UNROUNDED LONG VOWEL

In the production of this sound the movement of the speech organs are the same as those for [i] except that the duration of the articulation is longer and the speech organs are tense.

INITIAL

ì:	'blood'
í:ba	'to write, writing'
ì:ŋba	'to be cold, cold'
i:càŋ	'bravery'
i:cé:n	'flow'

MEDIAL

kí:ba	'to be afraid, fear'
tʰí:ba	'to be ugly, ugly'
s̀í:ba	'to die, death'
hí:ri	'to tow'
así:da	'here, at this place'

FINAL

kí:	'fear'
tʰí:	'ugly, nightsoil'
s̀í:	'odd-number'
hí:	'boat'
así:	'this'

[e:] HIGHER-MID FRONT UNROUNDED LONG VOWEL

In the production of this sound the front part of the tongue is raised (without raising the tip of tongue) towards the hard palate, but not as high as for [i:]. The lips remain spread to a certain degree modifying the oral cavity. The production of this sound also takes a long duration and the speech organs remain tense.

INITIAL

é:k	'clan'
e:ka:	'ace of the playing cards
é:rúm	'egg'
e:siya:	'Asia'
e:ro:ple:n	'aeroplane'

MEDIAL

išé:n	'younger sister's husband'
até:ba	'tame'
kakcé:ŋ	'ant'
até:nba	'short'
té:nawa:	'parrot'

FINAL

iné:	'mother's brother's wife'
mʌ́ŋge:	'tamarind'
a:re :	'name of a Manipuri month falling during October and November'
nʌ́tte:	'no'

[u] HIGH BACK ROUNDED SHORT VOWEL

In the production of this sound the back of the tongue is raised towards the soft palate as high as possible in the production of Vowel sounds. However the tip of the tongue remains unraised, as a matter of fact it is retracted to a certain degree so as to enable the back part of the tongue to rise to its required height without touching or forming any kind of aperture to cause friction. The raising of the back part of tongue in the production of back vowels in comparison to the raising of the front part of tongue in the production of front vowels is less, leaving always relatively a wider passage for air stream. The lips are rounded and also protruded to a certain degree modifying the oral cavity. Speech organs on the whole remain lax.

INITIAL

ú	'tree'
ùt	'ash'
uná:	'leaf'
ucé: k	'bird'
útúp	'wood'

MEDIAL

k^hùt	'hand'
trúm	'testicles'
ayúk	'morning'
ahùm	'three'
amúba	'to be black, black'

FINAL

kú	'coffin'
hú	'poison'
makú	'owl'
madú	'that'
marú	'seed'

[u:] HIGH BACK ROUNDED LONG VOWEL.

In the production of this sound the movements of the speech organs are the same as those for [u] except that the duration of production is longer and the speech organs are tense.

INITIAL

u:t	'camel'
ú:ba	'to see, scene'

ú:daba	'to disappear, disappearance'
u:n	'skin, wool'
ú:riŋ	'pimple'

MEDIAL

kʰu:r	'razor'
su:r	'tune'
tú:ba	'to save, saving'
akʰú:ba	'narrow'
lú:ba	'to clean, clean'

FINAL

cú:	'sugarcane'
macú:	'colour'
lú:	'fishing trap made of bamboo'
matú:	'fur'
tú:	'canal'

[o:] HIGHERMID BACK ROUNDED LONG VOWEL

In the production of this sound the back part of the tongue is raised towards the soft palate but not as high as for [u]. However the tip of the tongue remains unraised and is retracted to a certain degree so as to enable the back part of tongue to rise to the required hight. The lips are just rounded, modifying the oral cavity.

INITIAL

ó:k	'pig'
ó ba	'to vomit, vomiting'
o:ja: ~	'teacher'
ó tpa	'to annoy, annoyance'
ó:nba	'to roll, rolling'

MEDIAL

kó:k	'head'
thó:ŋ	'bridge'
thò:ŋ	'door'
amó:m	'female'
išo:r	'God'

FINAL

àmbo:	'cry of a cow'
šó:	'key'
t^{h}aró:	'lilly'
p^{h}o:to:	'photo'
šo:nó:	'idiot'

[a] HIGHER LOW BACK-CENTRAL (neither **Back** nor **Central** but in between): UNROUNDED SHORT VOWEL.

In the production of this sound the posterior of the central part of tongue is raised slightly (but without raising the tip of tongue) towards central part of the hard palate leaving a wide passage for the air to flow out. The lips remain neutral, i.e., neither rounded nor spread, modifying the oral cavity. The speech organ remains lax.

INITIAL

àšš	'exclamation marker'
àŋ	'yes'
amá:	'one'
ahàm	'three'
aní:	'two'

MEDIAL

ahàn	'elder'
làn	'thread'
p^{h}àm	'rank, place'
nàŋ	'you'
ŋàk	'neck'

FINAL

da	'at, to'
na	'by'
d^{h}arma	'religion'
kánba	'to be hard, hard'
kànba	'to save, saving'

[a:] HIGHER-LOW, BACK-CENTRAL (neither **Back** nor **Central** but in between), UNROUNDED LONG VOWEL.

In the production of this sound the movements of the speech organs are the same as those for [a] except that the duration of the production of sound is longer and the speech organs are tense.

INITIAL

a:sa:	'hope'
a:lu	'potato'
a:tma:	'soul'
a:há:ŋba	'to be in leisure, leisure'
a:hà:ŋba	'to be empty, empty'

MEDIAL

a:há:mba	'to be first, first'
lá:ŋ	'trap'
p^{h}á:n	'stool'
ká:ŋ	'chariot'
kà ŋ	'mosquito'

FINAL

šá:	'animal'
ŋà:	'fish'
ma:	'bedbug'
k^{h}á:	'south'
sab^{h}a:	'legislature'

CONSONANTS

The classification and formation of *Consonant* sounds of Manipuri language is done according to the criteria already described in chapter one. However individual consonant sounds are being described here first *Stops* then *Affricates*, *Spirants* *Nasals*, *Laterals*, *Trills*, *Semi-Vowels* and *Glides*.

STOPS

[p] VOICELESS UNASPIRATED BILABIAL STOP :

In the production of this sound the lips are pressed together to close the oral passage. The tongue remains more or less in a neutral position. The soft palate is raised to the nasal passage. Vocal cords remain open and do not vibrate. Thus the air stream compressed from lungs is completely stopped in the oral cavity. When the lips are opened abruptly this air is released with a certain degree of explosion. This sound occurs in all the positions, i.e., initially, medially and finally in items.

INITIAL

pûŋ	'hour'
pá:t	'lake'
pé:	'umbrella'
puja:	'worship'
pà:ṷ	'news'

MEDIAL

ipá:	'father'
upú	'box'
tupi	'hat'
go:pí:	'female dancer participating in Rāsa'
tà:pna	'slowly'

FINAL

to:p	'gun'
pa:p	'sin'
nàp	'snot, mucus'
ká:p	'a span'
sa:p	'curse'

[p] Occurs as the first member in consonant clusters with the follwing consonants:

[p], [pʰ], [t], [tʰ], [kʰ], [s], [h], [m], [n], [l], [r].

INITIAL

[-pl-]	ple:t	'plate'
[-pr-]	praja :	'public'

MEDIAL

[-pp-]	kàppa	'to weep, cry'
[-ppʰ-]	lé:ppʰàm	'halting place'
[-pt-]	kaptré:ŋ	'ginning machine'
[-ptʰ-]	ka:ptʰá:ba	'to polish, polishing'
[-pkʰ-]	lé:pkʰàtpa	'to stand, standing'
[-ps-]	cápsànba	'to squeeze, squeezing'
[-ph-]	lé:phànba	'to stop, stop'
[-pm-]	cápmà:nnala	'similarly'
[-pn-]	tà:pna	'slowly'
[-pl-]	ta:plá:kpa	'to catch, catch'

[pʰ] VOICELESS ASPIRATED BILABIAL STOP :

For the articulation of this sound the movements of the speech organs are the same as those for [p] except that a strong puff of air is exhaled simultaneous to the release of the explosion. This sound occurs only initially and medially.

INITIAL

pʰí	'cloth'
pʰi	'fee'
pʰá:ba	'to catch'
pʰá:gi	'joke'
pʰàm	'rank, post, place'

MEDIAL

ko:pʰi	'coffee'
a:pʰis	'office'

ša:pʰú:	'gemini'
capʰú	'cooking pot'
po:mpʰí	'rage'

[pʰ] occurs initially as the first element in combination with [r]

pʰro:k	'frock'

[b] VOICED UNASPIRATED BILABIAL STOP :

For the articulation of this sound the movements of the speech organs are the same as those for [p] except that the vocal cords remain vibrating.

This sound occurs in all the positions, but in the final position its frequency of occurrence is very low. It occurs mostly in loan items.

INITIAL

bo:m	'bomb'
bo:r	'boon'
bakta:	'orator'
biri	'cigar'
be:lun	'balloon'

MEDIAL

ó:ba	'to vomit, vomiting'
i:nba	'to push, pushing'
karba:r	'business'
kabó:	'Burma, Burmese'
kabó:k	'parched rice'

FINAL

to:lo:b	'remuneration'
bʰa:b	'idea'
naba:b	'ruler'

[b] occurs in combination with [l], [r], [y]. It occurs initially as the first member with all these sounds but medially only with [l].

INITIAL

[bl–]	ble:t	'blade'
[br–]	brij	'semen'
[by–]	bye:b^{h}a:r	'conduct, behaviour'

MEDIAL

[–bl–]	cu̍bli	'bridle'

[b^h] VOICED ASPIRATED BILABIAL STOP :

For the articulation of this sound the movements of the speech organs are the same as those for [b] except that a strong puff of air is exhaled simultaneous to the release.

This sound occurs initially and medially only in borrowed items.

INITIAL

b^{h}a:b	'idea'
b^{h}ara:	'rent'
b^{h}ut	'ghost'
b^{h}a:r	'burden'
b^{h}a:ro:t	'India'

MEDIAL

sab^{h}a:	'council, legislature'
bye:b^{h}a:r	'conduct'
bib^{h}isan	'younger brother of Ravana'
gumb^{h}i:r	'crocodile'
sab^{h}a:pati	'chairman'

[t] VOICELESS UNASPIRATED ALVEOLAR STOP :

In the production of this sound the tip of tongue touches the teeth ridge, closing the oral passage. The soft palate is raised to close the nasal passage. Vocal cords remain open and do not vibrate. Thus the air stream compressed from the lung is completely stoped in the oral cavity. When the tip of the tongue is withdrawn abruptly from the point of contact, the air is released with a certain degree of explosion.

This sound occurs in all the positions.

INITIAL

tá:	'spear'
tàn	'bread'
tìn	'insect'
tin	'spitton'
tará:	'ten'

MEDIAL

itá:	'female friend'
matú:	'fur'
mató:n	'tip'
matàm	'time'
ità:u̯	'male friend'

FINAL

pá:t	'lake'
purit	'priest'
taré:t	'seven'
numit	'day'
mìt	'eye'

[t] occurs also in combinations with the following consonants : [p], [b], [t], [t^h], [š], [h], [m], [n], [l], [r]

In all these combination it occurs as the first elements of the *clusters*, initially with [r] and medially with the rest.

INITIAL

[tr–]	tràm	'testicles'

MEDIAL

[–tp–]	kàtpa	'to offer, offerings'
[–tb–]	p^{h}utbo:l	'football'
[–tt–]	nàtte:	'no (negation)'

[–ttʰ–]	po:ttʰá:ba	'to rest, rest'
[–t̀š–]	ne:tš̀i̍nba	'to tread, treading'
[–th–]	po:thá:ba	'to load, load'
[–tm–]	aš̀ìtman	'wage'
[–tn–]	ratna	'gem'
[–tl–]	ke:tli	'kettle'

[tʰ] VOICELESS ASPIRATED ALVEOLAR STOP :

For the articulation of this sound the movements of the speech organs are the same as those for [t] except that a strong puff of air is exhaled simultaneous to the release.

This sound occurs only initially and medially.

INITIAL

tʰí:	'night-soil'
tʰá:	'moon'
tʰá:ŋ	'sword, knife'
thó:ŋ	'bridge'
tʰò:ŋ	'door'

MEDIAL

kutʰi̍:	'birth record'
itʰà:ṷ	'right'
kái̭tʰe:n	'market'
kó:ntʰò:ŋ	'gate'
niŋtʰáṷ	'king'

[tʰ] occurs also in combination with [r]. It occurs as the first element of clusters in the medial position.

[–tʰr–]	pitʰra:i̭	'bronze'

[d] VOICED UNASPIRATED ALVEOLAR STOP :

For the production of this sound the movements of speech organs are the same as those for [t] except that the vocal cords remain vibrating.

This sound occurs in all the positions but in the final position the frequency of occurrence is very low.

It occurs mostly in borrowed items.

Initial

da:ku	'dacoit'
da:n	'charity'
da:g	'stain, fault'
do:ri	'pulleys'
damak	'for'

Medial

adú	'that'
adó:m	'you (hon.)'
ta:da:	'elder, elder brother'
adúk	'that much'
adúm	'like that'

Final

band	'embankment
pa:wund	'pound'

[d] occurs also in combination with the following consonants : [b], [r], [w].

In all these combinations it occurs as the first element of the clusters, initially with [r] and [w] and medially with [b] and [r].

Initial

[dr-]	dram	'drum'
[dw-]	dwi:p	'island'

Medial

[-db-]	p^hudbo:l	'football'
[-dr-]	pa:dri	'clergyman'

[d^h] VOICED ASPIRATED ALVEOLAR STOP :

For the ariculation of this sound the movements of the speech organs are the same as those for [d] except that a strong puff of air is exhaled simultaneous to the release.

This sound occurs only initially and medially mostly in borrowed items.

INITIAL

d^{h}o:lo:k	'big drum'
d^{h}arma	'virtue, religion'
d^{h}a:tu	'metal'
d^{h}a;ra:	'issue'
d^{h}ruba	'pole star'

MEDIAL

gad^{h}a:	'donkey'
gand^{h}o:k	'sulphur'
sa:d^{h}u	'saint'
gand^{h}arba	'celestial musicians'
id^{h}áu̯	'father's grand father'

[ṭ] VOICELESS UNASPIRATED RETROFLEX :

In the production of this sound first of all the tip of the tongue is curled to a certain degree and then it touches the posterior part of the teeth ridge closing the oral passage. The soft palate is raised to close the nasal passage. Vocal cords remain open and do not vibrate. The air compressed from lungs is thus completely stopped in the oral cavity. When the articulator is withdrawn abruptly from the point of contact, the air is released with a certain degree of explosion. However this sound does not have the same degree of retroflexion as Hindi and Dravidian retroflex sounds have, it, however, approximates them. Borrowed items which have a [ṭ] sound in the source language may be optionally heard with the approximation mentioned above. Sometimes it is also heard optionally in native items but only medially and finally. When [t] occurs more than once in a single item, the latter [t] can be freely substituted by [t].

The [t] has a higher frequency of occurrence in comparison to [ṭ]. However in Manipuri [t] and [ṭ] under the said conditions are substitutable without leading to any semantic change.

INITIAL

ṭupi ~ tupi	'hat'
ṭika: ~ tika:	'vaccination'
ṭi:ka: ~ ti:ka:	'comment'
tike:ṭ ~ tike:t	'ticket'

MEDIAL

kàṭpa ~ kàtpa	'to offer, offerings'
càṭpa ~ càtpa	'to go, gait'
aṭiya: ~ atiya:	'sky'
ará:ṭpa ~ ará:tpa	'to worship, worshipped'
kò:ṭpa ~ kò:tpa	'to scoop'

FINAL

ko:ṭ ~ ko:t	'coat'
kò:ṭ ~ kò:t	'granary'
pá:ṭ ~ pá:t	'lake'
khàṭ ~ khàt	'hand'
lámcàṭ ~ lámcàt	'conduct, character'

[k] VOICELESS UNASPIRATED MEDIO-VELAR STOP :

In the production of this sound the back part of the tongue touches the soft palate closing the oral passage. The soft palate is raised to close the nasal passage. Vocal cords remain open and do not vibrate. Thus the air stream compressed from the lungs is completely stopped in the oral cavity. When the back of the tongue is withdrawn abruptly from the point of contact, the air is released with a certain degree of explosion.

This sound occurs in all the positions.

INITIAL

ka:	'room'
ká:ŋ	'chariot'
kà:ŋ	'mosquito'
kûn	'twenty'
kó:m	'pit'

MEDIAL

ùkûp	'wood powder'
tàkpa	'to grate, grating'
cikni	'bolt'
lìkli	'bottle'
da:ku	'dacoit

FINAL

kó:k	'head'
Kabó:k	'roasted maize'
cà:k	'food'
co:k	'chalk'
damak	'for'

[k] occurs in combination with the following consonants :
[p], [p^h], [t], [t^h], [k], [k^h], [c], [j], [s], [h], [n], [ŋ] [l], [r]

In all these combinations it occurs as the first element of the *clusters*, initially with [l] and [r] and medially with all.

INITIAL

[kl-]	klip	'clip'
[kr-]	krike:t	'cricket'

MEDIAL

[-kp-]	kàkpa	‘to cut, cut’
[-kp^h-]	mukp^{h}ú	‘inkpot’
[-kt-]	kàktaba	‘not to cut, uncut’
[-kt^h-]	níkt^{h}ò:kpa	‘to shift, shifting’
[-kk-]	ukká:i̯	‘tiller’
[-kk^h-]	makk^{h}àn	‘type’
[-kc-]	kakcé: ŋ	‘ant’
[-kj-]	cukjà:k	‘maize’
[-ks-]	e:ksan	‘axle’
[-kh-]	amukhànba	‘to turn over’
[-kn-]	cikni	‘bolt’
[-kŋ-]	tó:kŋa:	‘rumour’
[-kl-]	lìkla:	‘dew’
[-kr-]	kè:kru	‘soap nut’

[k^h] VOICELESS ASPIRATED MEDIO-VELAR STOP:

For the articulation of his sound the movement of the speech organs remains the same as that for [k] except that a strong puff of air is exhaled simultaneous to the release.

This sound occurs only initially and medially.

INITIAL

k^{h}á:	‘south’
k^{h}àk	‘never’
k^{h}ó:ŋ	‘canal’
k^{h}ò:ŋ	‘leg’
k^{h}o:m	‘breast, milk’

MEDIAL

pá:k^{h}àŋ	‘bachelor’
tàŋk^{h}a:i̯	‘half’
ái̯k^{h}ò:i̯	‘we’

ka:kʰàtpa	'to climb, climbing'
akʰàkpa	'to be brittle, brittle'

[kʰ] occurs in combination with [r]. It occurs as the first element in the medial position.

[–kʰr–]	pá:kʰra:	'widower'

[g] Voiced Unaspirated Medio-velar Stop :

For the articulation of this sound the movements of the speech organs are the same as those for [k] except that the vocal cords remain vibrating.

This sound occurs in all the positions, but in the final position its frequency of occurrence is very low. It occurs mostly in borrowed items.

Initial

gi	'of'
go:m	'gum'
gada:	'mace, club'
guha:	'well'
guli	'tablet'

Medial

cagá :	'income'
cugúm	'residence'
pʰá:gi	'joke'
magún	'quality'
llgla:	'dew'

Final

ra:g	'raga'
da:g	'stain, fault'
jug	'era'

[g] occurs in combination with the following consonants :

[g^h] [c] [l] [r]

It occurs as the first element of the *clusters*, initially with [r] and medially with [c], [g^h] and [l].

INITIAL

[gr–]	graha	'planet'

MEDIAL

[–gc–]	hagcá:ŋ	'health'
[–gg^h–]	da:gg^{h}ar	'post office'
[-gl–]	p^{h}àgla:ŋ	'wall'

[g^h] VOICED ASPIRATED MEDIO–VELAR STOP :

For the production of this sound the movements of speech organs are the same as those for [g] except that a strong puff of air is exhaled simultaneous to the release.

This sound occurs only initially and medially in borrowed items.

INITIAL

g^hi:	'refined butter'
g^hhari	'clock, watch'
g^huti	'a kite'
g^humti	'canopy'
g^hus	'bribe'

MEDIAL

sing^{h}ara:	'pie'
da:gg^{h}ar	'post office'
mag^{h}a:	'leonis star'

[ʔ] GLOTTAL STOP :

In the production of this sound the tongue remains retracted to a certain degree due to the muscular tenseness in the oral cavity as well as in the pharyngal cavity but the oral passage remains unobstructed. The soft palate is raised to close the nasal passage. Glottis (the space between the vocal cords) is closed completely by bringing the vocal cords into close contact. The air behind the glottis is compressed by pressure from the lungs. When the glottis is opened abruptly by separating the vocal cords the air escapes through the oral cavity. It is neither a breathed nor a voiced sound.

This sound occurs only *intervocalically* in some items and can freely vary with [k] without leading to any semantic change but not *vice versa.*

kʰàʔu ~ kʰàku	'knee'
là:ʔu ~ là:ku	'come'

AFFRICATES

[c] VOICELESS UNASPIRATED MEDIO-PALATAL AFFRICATE :

In the production of this sound the front part of the tongue touches the middle part of the hard palate closing the oral passage. The soft palate is raised to close the nasal passage. Vocal cords remain open and do not vibrate. The air stream compressed from lungs is completely stopped in the oral cavity. At the time of release the articulator is withdrawn slowly so as to make such an aperture that the air stream squeezes it with a certain amount of friction.

This sound occurs initially, medially and finally. Its final occurrence is very rare.

INITIAL

cé:k	'brick'
cé:ŋ	'raw rice'
cí:ŋ	'quantity'
cà:k	'food, boiled rice'
cúm	'lizard'

MEDIAL

icé:	'elder sister'
i:cé:n	'flow'
ucé:k	'bird'
macân	'material'
icàn	'younger sister'

FINAL

k^ho:ro:c	'pocket money'

[c] occurs in combination with [c] and [c^h] in the medial position as the first member of the *clusters.*

[–cc–]	po:ccái̯	'luggage'
[-cc^h-]	ucc^ho:p	'feast, festival'

[c^h] VOICELESS ASPIRATED MEDIO-PALATAL AFFRICATE :

For the articulation of this sound the movement of the speech organs are the same as those for [c] except that a strong puff of air is exhaled simultaneous to the release.

This sound occurs only initially and medially. But in the latter case the frequency of occurrence is very low. It occurs mostly in borrowed items.

INITIAL

c^ha:na:	'strainer'
c^hinba	'to be sour, sour'

c^{h}e:ni	'chisel'
c^{h}uti	'leave'
c^{h}a:tra	'student'

MEDIAL

ne:c^{h}ànba	'to stamp, stamp'
ucc^{h}o:p	'feast, festival'

[j] VOICED UNASPIRATED MEDIO-PALATAL AFFRICATE :

For the articulation of this sound the movements of speech organs are the same as those for [c] except that the vocal cords remain vibrating.

This sound occurs in all the positions but mostly in borrowed items.

INITIAL

ja:m	'black plum'
jantra	'armlet'
jaŋgal	'forest'
ja:ti	'race, nation'
jagó:j̨	'dance'

MEDIAL

phíjò:n	'dress'
o:ja:	'teacher'
k^{h}úje:n	'armlet'
k^{h}aji:yi ~ k^{h}ája:j̨	'cheek'
k^{h}úja:yi ~ k^{h}úja:j̨	'jug'

FINAL

po:kra:j	'topaz'
brij	'semen'
bruj	'brush'
gaj	'yard'
jaha:j	'ship'

[jʰ] VOICED ASPIRATED MEDIO-PALATAL AFFRICATE :

For the production of this sound the movements of speech organs are the same as those for [j] except that a strong puff of air is exhaled simultaneous to the release.

This sound occurs initially and medially but mostly in borrowed items. Its medial occurrence is very rare and there it can freely vary with [j] though not *vice versa*.

INITIAL

jʰa:n	'cymbal'
jʰarap	'ladle with holes'
jʰa:ri	'a drinking pot'
jʰut	'cheat'
jʰula:n	'a festival'

MEDIAL

o:jʰa: ~ o:ja	'teacher'

SPIRANTS

[s] VOICELESS ALVEOLAR SPIRANT :

In the production of this sound the lips are spread to a certain degree and the tip of the tongue including the anterior of the blade of the tongue is raised towards the teeth-ridge leaving a narrow aperture through which air stream passes with a hissing sound, technically called 'friction'. The soft palate is raised to close the nasal passage. The vocal cords remain open and do not vibrate. The air compressed from lungs is squeezed through the narrow opening in the oral cavity causing audible friction.

This sound occurs in all the positions.

INITIAL

sa:pʰu	'flow'
sana:	'gold'

se:ndal	'slippers'
sindur	'vermillion'
se:r	'seer'

MEDIAL

a:sa:	'hope'
así:	'this'
asɨk	'so much'
asɨmna	'thus'
iskart	'skirt'

FINAL

pa:s	'pass'
sarkas	'circus'
darka:s	'application'
g^hus	'bribe'
ra:s	'Rasa, folk dance'

[s] occurs in combination with [t], [ṭ], [k], [m] in the medial position as the first element of the *clusters*.

[-st-] ~ [sṭ]	ista:m ~ isṭa:m	'stamp'
[- sk -]	iskart	'skirt'
[-sm-]	kismiš	'raisine'

[š] VOICELESS MEDIO-PALATAL SPIRANT :

In the production of this sound the lips are spread to a certain degree and the front of the tongue is raised towards the hard palate leaving a narrow groove-shaped aperture through which air stream passes with a certain amount of friction. The soft palate is raised to close the nasal passage. The vocal cords remain open and do not vibrate. The air stream compressed from lungs is squeezed through the narrow opening in the oral cavity causing audible friction.

This sound occurs in all the positions. However in the final position it occurs mostly in borrowed items.

INITIAL

šɨŋ	'fuel'
šiŋ	'ginger'
šé:n	'money'
šá:	'animal'
ša:pʰá:	'Gemini'

MEDIAL

ušá:	'branch'
išəj	'song'
išɨŋ	'water'
išáŋ	'moss'
pišám	'eyebrow'

FINAL

ta:š	'playing cards'
de:š	'country'
be:š	'dress'
ko:š	'dictionary'
a:ka:š	'sky'

[h] VOICELES PHARYNGAL SPIRANT:

In the production of this sound the tongue remains in the neutral or relaxed position leaving the oral cavity wide open. The soft palate is raised to close the nasal passage. The vocal cords remain slightly open and do not vibrate. The air stream compressed from lungs passes through the mid open glottis causing a certain amount of friction in the pharyngal cavity. The nature of this sound mainly depends and varies according to the following vowel sound.

This sound occurs only initially and medially.

INITIAL

ha:kim	'magistrate'
há:kùm	'last year'
hí	'boat'
hìk	'louse'
hàŋ	'ankle'

MEDIAL

graha	'planet'
ahàn	'elder'
ahìŋ	'night'
ahùm	'three'
ahàj	'fruit'

NASALS

[m] Voiced Bilabial Nasal :

In the production of this sound the lips remain in firm contact closing the oral passage. The tongue remains in neutral position. The soft palate is lowered leaving nasal passage open for the air compressed from lungs to pass freely through it. The vocal cords remain vibrating.

This sound occurs in all the positions.

INITIAL

ma:	'bed bug'
màŋ	'dream'
míŋ	'name'
mapú:	'master'

MEDIAL

ímà:	'mother'
mami:	'image'
mamú:	'sting'
mamàn	'rent'
mo:mpá:k	'mat'
amá:	'one'

FINAL

maràm	'reason'
mayò:m	'pocket'
manàm	'smell'
mayá:m	'general'
map^{h}àm	'place'

[m] occurs in combination with the following consonants : [p], [p^{h}], [b] [b^{h}], [t], [t^{h}], [d], [k] [k^{h}], [g], [c], [j], [s], [š], [h], [m], [n], [ŋ], [l], [y].

In all these combinations it occurs as the first element in the medial position.

[–mp–]	lampá:k	'lawn'
[–mp^{h}–]	tàmp^{h}a:	'ruby'
[–mb–]	làmbi	'road, path'
[–mb^{h}–]	gumb^{h}i:r	'crocodile'
[–mt–]	sà:mtu	'wool'
[–mt^{h}–]	cumt^{h}á:ŋ	'rainbow'
[–md–]	tò:mda	'towards'
[–mk–]	lamkě:tpa	'to be obstinate, obstinate'
[–mk^{h}–]	ŋàmk^{h}a:i̤	'limitation'
[–mg–]	yùmgi	'domestic'
[–mc–]	lámcàt	'behaviour'
[–mj–]	kùmja:	'century'
[–ms–]	yó:msànba	'to wrap, wraping'
[–mš–]	lamšá:	'wild beast'
[–mh–]	lamhàn	'unploughed area'
[–mm–]	cámmà:naba	'similarly'
[–mn–]	kó:mna:	'freely'
[–mŋ–]	lamŋà:mu	'waterfowl'

[-ml–]	kó:mla:	'orange'
[–my–]	làmya:i̯	'mid way'

[n] VOICED ALVEOLAR NASAL :

In the production of this sound the tip of the tongue touches the teeth ridge closing the oral passage completely. The soft palate is lowered leaving nasal passage open for the air compressed from lungs to pass freely through it. The vocal cords remain vibrating.

This sound occurs in all the positions.

INITIAL

nàŋ	'you'
nàp	'snot, mucus'
núŋ	'inside'
nupá:	'man, male'
nupí:	'woman, female'

MEDIAL

aní:	'two'
kaná:	'who'
caní:	'two hundred'
cánba	'to be kind, kind'
kantʰa:	'quilt'

FINAL

icàn	'younger sister'
ahàn	'old man, elder'
a:san	'seat'
indó:n	'aunt'
làn	'prosperity'

[n] occurs in combination as the first element of the *clusters* with the following consonants in the medial position.

[pʰ], [b], [tʰ], [d], [k], [gʰ], [c], [j], [š], [h], [m], [n], [y].

[–npʰ–]	tɪnpʰa:	'leach'
[–nb–]	tá:nba	'to earn, success'
[–nt–]	kantak	'slightly hard'
[–ntʰ–]	kantʰi	'Basil beads'
[–nd–]	cando:n	'sandalwood'
[–nk–]	ta:nkó:k	'first time'
[–nkʰ–]	tinkʰá:	'Bible'
[–ng–]	re:nga:ri	'train'
[–nc–]	ta:ncàp	'bracelet'
[–nj–]	ta:njá:	'chance, occasion'
[–nš–]	inšà:ŋ	'curry'
[–nh–]	kánhànba	'to save, saving'
[–nm–]	ta:nme:n	'time'
]–nn–]	kánna	'strongly'
[–ny–]	kanya:	'girl, bride'

[ŋ] VOICED MEDIO-VELAR NASAL :

In the production of this sound the back part of the tongue touches the soft palate closing the oral passage completely. The soft palate is lowered leaving nasal passage open for the air compressed from lungs to pass freely through it. The vocal cords remain vibrating.

This sound occurs in all the positions.

INITIAL

ŋàk	'neck'
ŋà:	'fish'
ŋanta:	'early'
ŋará:ŋ	'yesterday'
ŋasí	'today'

MEDIAL

iŋgit	'signal'
aŋànba	'to be light, light'
iŋkʰó:l	'garden'
cíŋdo:m	'peak'
cá:ŋcàt	'rate'

FINAL

àŋ	'yes'
awá:ŋ	'north'
aŋá:ŋ	'child'
ahiŋ	'night'
cíŋ	'hill'

[ŋ] occurs in combination as the first element of the *clusters* with the following consonants in the medial position.

[p], [pʰ], [b], [t], [tʰ], [d], [k], [kʰ], [g], [gʰ], [c], [j], [s], [š], [h], [m], [n], [l], [r], [y].

[-ŋp-]	nò:ŋpò:k	'least'
[-ŋpʰ-]	kʰó:ŋpʰàm	'foot-print'
[-ŋb-]	ì:ŋba	'to be cold, cold'
[-ŋt-]	tʰá:ŋtùp	'date'
[-ŋtʰ-]	kà:ŋtʰo:l	'bedstead'
[-ŋd-]	tùŋda	'afterwards'
[-ŋk-]	máŋkàt	'marriage price'
[-ŋkʰ-]	kà:ŋkʰal	'mosquito'
[-ŋg-]	máŋgàl	'pea'
[-ŋgʰ-]	siŋgʰa:ra:	'pie'
[-ŋc-]	kʰó:ŋcàt	'voyage'
[-ŋj-]	kà:ŋjai̯	'polo stick'
[-ŋs-]	ka:ŋsi	'gong'
[-ŋš-]	amá:ŋšàŋ	'latrine'
[-ŋh-]	háŋhò:nba	'to empty, empty'

[–nm–]	há:ŋmai̯	'adze'
[–ŋn–n]	tasé:ŋna	'truly'
[–ŋl–]	ká:ŋlûp	'clan'
[–ŋr–]	cé:ŋrûm	'mushroom'
[–ŋy–]	kʰò:ŋya:i̯	'second finger'

It also occurs finally as the first element in combination with [k].

[–ŋk–]	te:ŋk	'tank'

LATERAL

[l] VOICED ALVEOLAR LATERAL :

In the production of this sound the lips are spread to a certain degree. The tip of the tongue including the anterior part of the blade touches the alveolar ridge closing the air stream completely in the middle region leaving openings on both the sides of the tongue for the air to pass through. The soft palate is raised to close the nasal passage. The vocal cords remain vibrating. This sound occurs in all the positions, and it freely varies with [n] in the final position.

INITIAL

làŋ	'thread'
lú:	'bamboo–net'
ló:k	'phlegm, cough'
làk	'mode'
laká:	'heart'

MEDIAL

a:lu	'potato'
alla:	'Allah'
kò:mla:	'orange'
alma:ri	'almirah'
ka:lé:n	'summer'

FINAL

ko:l ~ ko:n	'machine'
jha:l ~ j^{h}a:n	'cymbal'
ló:l ~ ló:n	'language'
lìl ~ lìn	'snake'
tìl ~ tìn	'insect'

It may be mentioned here that the syllable initial [l] when preceded by an open syllable is always substituted by [r] in polymorphemic words.

i+lá i̯bà:k →	irá i̯bà:k	'my mother-land'
a+lè:mba →	arè:mba	'to remain, remainder'
i:+le →	í:re	'has written'
ó:+li →	ó:ri	'vomiting'

etc. etc.

[l] occurs as the first element of *clusters* in combination with the following sounds in medial position.

[b], [t^{h}], [g], [h], [l].

[– lb–]	pé:lba	'to please, pleasure'
[th^{h}–]	lalt^{h}ùm'	'property'
[–lg–]	salgo:m	'turnip'
[ˈ–lh–]	pé:lhà nba	'to satiate, satisfaction'
[–ll–]	tallá:	'tree'

TRILL

[r] VOICED ALVEOLAR TRILL :

In the production of this sound the tip of the tongue taps against the teeth ridge causing a series of taps produced rapidly. The soft palate is raised to close the nasal passage. The vocal cords remain vibrating.

This sound occurs in all the positions, but in the final position it occurs mostly in borrowed items.

INITIAL

ra:g	'raga'
ratna	'gem'
re:ti	'file'
ra:s	'Rasa, folk dance'
racana:	'essay'

MEDIAL

árik	'beads'
é:rúm	'egg'
kurá:k	'butterfly'
arúm	'fever'
uriŋ	'pimple'

FINAL

labar	'rubber'
cina:r	'musk melon'
jo:kʰa:r	'tuberculosis'
gumbʰi:r	'crocodile'
a:ca:r	'pickle'

[r] occurs as the first member of the *clusters* in combination with the following consonants in the medial position.

[p], [pʰ], [b], [bʰ], [t], [tʰ], [d], [k], [kʰ], [g], [h], [m], [l].

[–rp–]	karpu:r	'camphor'
[–rpʰ–]	có:rpʰo:n	'olive'
[–rb–]	karba:r	'business'
[–rbʰ–]	garbʰa pá:ba	'to conceive'
[–rt–]	ko:rta:n	'cymbal'
[–rtʰ–]	artʰa	'meaning'

[–rd–]	parda:	'curtain'
[–rk–]	sarkas	'circus'
[–rkʰ–]	darkʰa:s	'application'
[–rg–]	sarga	'heaven'
[–rh–]	so:rhò:nba	'to breathe'
[–rm–]	dʰarma	'religion'
[–rl–]	ba:rli	'barley'

[ɽ] VOICED RETROFLEX FLAP:

In the production of this sound first of all the tip of the tongue is curled to a certain degree and then it touches the back part of the alveolar ridge closing the oral passage momentarily. Then the articulator is withdrawn from the point of contact rapidly producing only one tap for the release of the air stream. The soft palate is raised to close the nasal passage. Vocal cords remain vibrating. This is not as retroflex a sound as in Hindi or in Dravidian languages, but has a lesser degree of retroflexion. Borrowed items which have a [ɽ] sound in the source Language may be optionally heard with the approximation mentioned above without leading to any semantic change. [r] has a higher frequency of occurrence in comparison to [ɽ].

paɽda:	~ parda:	'curtain'
rabaɽ	~ rabar	'rubber'

SEMI-VOWELS

[w] VOICED BILABIAL SEMI-VOWEL:

In the production of this sound the lips are pursed together to a certain degree assuming a round shape. The back part of the tongue is raised towards the posterior part of the soft palate. But it neither touches nor forms any aperture to cause friction. The position of thetongue for [w] is further retracted and considerably higher than [u]. The soft palate is raised to close the nasal passage. The vocal cords remain vibrating. The air compressed from the lungs passes out unobstructed.

The position of lips for this sound varies to a certain degree with different speakers and according to the vowel sound that follows.

[w] sound occurs initially and intervocalically.

INITIAL

wà:	'bamboo'
wá:ri	'prose, story'
wá:ro:l	'statement'
wá:j̬	'musk'
wá:ŋba	'to be tall, tall'

INTERVOCALIC

awá:ŋ	'north
iwá:	'husband'
kuwá:	'betelnut'
awá:	'Burmese'
kuwà:k	'crow'

[y] VOICED MEDIO-PALATAL SEMI-VOWEL :

In the production of this sound the lips are spread to a certain degree. The front part of the tongue is raised towards the anterior part of the hard palate. But it neither touches nor forms any aperture to cause friction. The position of the tongue for [y] is further advanced and considerably higher than [i]. The soft palate is raised to close the nasal passage. The vocal cords remain vibrating. The air compressed from the lungs passes out unobstructed.

The position of lips for this sound varies to a certain degree with different speakers and according to the vowel sound that follows.

[y] sound occurs initially and intervocalically.

INITIAL

yá:gi	'of the tooth'
yà:ŋ	'backbone'
yá:ŋba	'to be light, light'
yà:ŋba	'to be swift, swift'
ya:tʰàŋ	'order'

INTERVOCALIC

ayúk	'morning'
mayúŋ	'length'
mayé:k	'script'
mayó:m	'pocket'
mayá:m	'general'

GLIDES

[u̯] VOICED BACK GLIDE :

In the production of this sound the lips are pursed together to a certain degree assuming a round shape. The back part of the tongue is raised towards the posterior part of the soft palate. But it neither touches nor forms any aperture to cause friction. The position of the tongue for [u̯] is slightly retracted and higher than [u]. It glides towards the position usually adopted for the production of Back Vowels. The soft palate is raised to close the nasal passage. The vocal cords remain vibrating. The air compressed from the lungs passes out unobstructed. [u̯] is comparatively less sonorous than [u]. It is a non-syllabic sound.

The position of lips for this sound varies to a certain degree with different speakers and according to the vowel sound that precedes.

[u̯] occurs medially between a vowel and a consonant and finally after a vowel.

MEDIAL

há:u̯púŋ	'kettle-drum'
náu̯pʰàm	'womb'
tʰàu̯ba	'to drive , driving'
kʰó:i̯dò:u̯	'navel'

FINAL

yá:u̯	'sheep'
pà:u̯	'news'
nàu	'oar'

[i̯] VOICED FRONT GLIDE :

In the production of this sound the lips are spread to a certain degree. The front part of the tongue is raised towards the anterior part of the hard palate. But it neither touches nor forms any aperture to cause friction. The position of the tongue for [i̯] is slightly advanced and higher than [i]. It glides towards the position usually adopted for the production of front vowels. The soft palate is raised to close the nasal passage. The vocal cords remain vibrating. The air compressed from the lungs passes out unobstructed. [i̯] is comparatively less sonorous than [i]. It is a nonsyllabic sound.

The position of the lips for this sound varies to a certain degree with different speakers and according to the vowel sound that preceds.

[i̯] occurs medially between a vowel and consonant and finally after a vowel.

MEDIAL

mái̯pɔ̀:kpi	'a name'
ó:i̯pʰè:i̯	'possible'
ó:i̯ba	'to be, being'
lái̯te:	'not available'

FINAL

ái̯	'I'
kʰó:i̯jè:i̯	'fishing rod'
mákʰò:i̯	'they'
ŋàmkʰa:i̯	'limitation'

3. PHONOLOGY AND SCRIPT

Human beings are capable of producing a very large number of different speech sounds, but each language uses only a limited number of them, out of which some are distinctive and the rest nondistinctive. Distinctive speech sounds alone distinguish one meaning from another in a language. These are the contrasts, while the other differences may be of complementation or free variation. The examination of the phonetic data with a view to sorting out the distinctive difference is known as Phonemic Analysis and this process helps the analyst in organising the total amount of different speech sounds heard in the utterances of the speech community into a limited number of classes, depending upon the language, called Phonemes. The sounds which constitute a single phoneme are phonetically similar in the sense that they share some features of articulation or some combination of features absent from the members of all other phonemes. Every phoneme as a whole contrasts in at least one position with every other phoneme. When all the sounds of a language including both suprasegmentals as well as segmentals have been classified into phonemes, a set of phonological units is obtained in terms of which the entire vocabulary and grammar of the language can be easily described.

The speech sounds presented in the last chapter of the *Reader* are of phonetic nature. In other words they are perceptually received speech units which one hears different from each other for the first time after coming into contact with the language one intends to learn. These differences may not make any distinction as for as meaning is concerned. Therefore, a brief phonemic analysis of Manipuri language is presented in this chapter along with a note on the adoption and adaptation of Script.

The phonemic analysis of a language presupposes some concepts to be understood clearly by the learners. In the light of the phonemic analysis of Manipuri the fallowing concepts must be understood by the learners.

CONTRAST :

Distinctive difference in speech sounds which results in distinguishing one meaning from another is known as contrast. Thus within the system of Manipuri speech sounds [p] is different from or contrasts with [pʰ] as seen in [pí] 'tears' versus [pʰí] 'cloth'. Similarly [p], [pʰ], [b], [bʰ] are in contrast in words like [pá:t], [pʰá:m] [ba:m] [bʰa:r]. [p] contrasts with [t], [k], in words like [pí], [tí], [kí:] and so on. Such contrastive sounds are Phonemes.

COMPLEMENTATION :

If two or more sounds are so distributed among the forms of a language that none of them ever occurs in the same position as others, and if all the sounds in question are phonetically similar in the sense of sharing a feature of articulation absent from all other sounds, they are classified together as allophones of the same phoneme. Thus within the system of Manipuri speech sounds [w] is in complementation, with [u̯] in [wá:ri] 'story' [awá:ŋ] 'north' and [áu̯npòt:] 'dowry', [pà:u̯] 'news' etc. As illustrated [w] occurs initially and intervocalically while [u̯] occurs elsewhere. Similarly [y] is in complementation with [j] in [yá:] 'tooth' [ayúk] 'morning' and [ái̯] 'I' [kʰó:ijè:i̯] fishing-rod' etc.

FREE VARIATION :

If two or more speech sounds occur nondistinctively in the same environment, they are in free variation as [l] and [n] in [tàl] ~ [tàn] 'bread', [lìl] ~ [lin] 'snake' and [ló:l] ~ [ló:n] 'language' etc.

Manipuri sounds also exhibit differences in terms of length and nasalisation. While length is a distinctive feature for vowels as well as consonants, nasalisation is non distinctive. The two features are discussed below.

LENGTH :

One of the significant dimensions of speech sounds is duration. By their very nature, all vowels, semivowels, spirants, nasals, laterals and trills can be prolonged indefinitely, until the breath supply is exhausted, stops and affricates on the other hand cannot be prolonged in the same manner. In the case of stops and affricates, the duration of hold during the closure results in length. However the hold of a voiced stop or affricate can continue only till the air pressure above the glottis is equal to that below it, and the hold of a voiceless stop or affricate is mere silence.

All such phenomena are matters of duration. It is customary to divide the continuum of duration into two dimensions and to speak of short and long sounds. In Manipuri, speech sounds are both short as well as long, [i, u, a] in [imà:] 'mother', [uná:] 'leaf', [amá:] 'one' are short and [i:, u:, a:, e:, o:] in [í:ba] 'to write' [ú:ba] 'to see' [a:lu] 'potato', [é:rûm] 'egg', [o:ba] 'to vomit', are long and so on. Distinctive duration in Manipuri is marked as [:] with vowels while the same is expressed by the doubling of the consonnnts as in [kàppa] 'to cry', [nâtte:] 'no' [ukkà:i] 'tiller' etc.

NASALIZATION :

When close syllables in Manipuri are marked by their ending in nasal sounds the obligatory element of the syllable, that is, the vowel sound is nasalized to a certain degree. The formation of nasal sounds has been described earlier. By nasalization of a sound it should be understood that simultaneous to the release of preceding sound the vocal organs adopt position required for the production of the following nasal sound. In other words the soft palate which was to begin with in raised position closing the nasal passage comes down and allows a part of the air to flow out of the nasal cavity simultaneous to the oral release. But this phenomenon is nondistinctive thus predictable in Manipuri.

DISTRIBUTION :

Distribution of speech sounds in a language is their specific occurrence with reference to the location or position stated as initial, medial, final etc., or in terms of syllablic structure as syllable initial and syllable final, etc. This distribution or the occurrence of speech sounds is always language specific and often the learner faces various difficulties in learning the new system and sounds inasmuch as some of the sounds do not occur in the language at all or they do not occur in the 'systematic fashion comparable to the system of his native language.

Occurrence of tones, non–occurrence of retroflex sounds, the restricted occurrence and the free variation of certain sounds in Manipuri are the likely areas of difficulty for Indo-Aryan and Dravidian learners specially. The teacher as well as the learner has to be careful in this regard. The distribution of distinctive Manipuri sounds is as follows :

Tones occur in all the positions and with all the vowel sounds. There is no non-distinctive tone in Manipuri.

Vowels occur in all the positions, but they do not occur in a sequence and none of them has more than one allophone.

In the final position short and long vowels /i/ ~ /iː/ and /u/ ~ /uː/ are in free variation.

Consonants have the following distribution.

Voiceless stops [p, t, k] occur in all the positions. [t] has [t] and [ṭ] allophones and [k] has [k] and [ʔ] allophones. The later allophones in each case freely vary with the former ones but not *vice versa*.

Voiceless stops are voiced (not shown in the phonetic transcription) to a slight degree in intervocalic position.

Voiced stops /b, d, g/ occur in all the positions and do not have more than one allophone each.

Aspirates, both voiceless as well as voiced, *i.e.*, /p^h, t^h, k^h, b^h d^h, g^h/ occur only initially and medially. Voiced aspirates occur mostly in borrowed items. All these aspirates do not have more than one allophone each.

All the unaspirated affricates occur in all the positions. Affricates do not have more than one allophone each. Aspirated affricates occur only initially and medially and mostly in borrowed items. [j] in its final occurrence occurs mostly in borrowed items.

Spirants, except [h], occur in all the positions. [h] occurs only initially and medially. Spirants do not have more than one allophone each.

Nasals occur in all the positions and do not have more than one allophone each.

The lateral occurs in all the positions but freely varies with /n/ in the final position and with /r/ in the intervocalic position.

The trill occurs in all the positions. /r/ has two allophones [r] and [ɾ] where the latter can freely vary with the former but not *vice versa*.

The semivowels occur in all the positions. /w/ has two allophones—[w] occurring initially and intervocalically and [u̯] occurring elsewhere. Similarly /y/ has two allophones—[y] occurring initially and intervocalically and [i̯] occurring elsewhere.

There are a few geminate clusters of /p, t, k, c, m, n, l/and/y/. Two consonant clusters are more in number. Three consonant clusters are rare. Initial clusters and final clusters are very rare.

The phonemic system of Manipuri language is presented below briefly in the form of a chart and then in terms of matrices.

Phoneme	*Allophone*	*Occurrence*
TONES		
/ˎ/	[ˎ]	all the position
/·/	Nil [ˏ]	,,
/-/	(left unmarked)	all the positions (but mostly in borrowed items)
VOWELS		
/i/	[i]	all the positions
/i:/	[i:]	,,
/e:/	[e:]	,,
/u/	[u]	,,
/u:/	[u:]	,,
/o:/	[o:]	,,
/a/	[a]	,,
/a:/	[a:]	,,

CONSONANTS

STOPS :

Phonems	*Allophone*	*Occurrence*
/p/	[p]	all the positions
/pʰ/	[pʰ]	initially and medially
/b/	[b]	all the positions (mostly in borrowed items)
/bʰ/	[bʰ]	initially and medially (mostly in borrowed items)
/t/	[t]	all the positions
	[ṭ]	all the positions (in free variation with [t] as stated earlier)
/tʰ/	[tʰ]	initially and medially
/d/	[d]	all the positions (rare in the final position, occurs mostly in borrowed items)
/dʰ/		initially and medially (mostly in borrowed items)
/k/	[k]	all the positions
	[ʔ]	in the inter-vocalical position [ʔ] ~ [k]
/kʰ/	[kʰ]	initially and medially
/g/	[g]	all the positions (mostly in borrowed items)
/g/	[gʰ]	initially and medially (mostly in borrowed items)

AFFRICATES :

/c/	[c]	all the positions
/cʰ/	[cʰ]	initially and medially (mostly in borrowed items)
/j/	[j]	all the positions (mostly in borrowed items)

Phoneme	*Allophone*	*Occurrence*
/jʰ/	[jʰ]	initially and medially (rare medially, mostly in borrowed items)
SPIRANTS :		
/s/	[s]	all the positions
/š/	[ś]	,,
/h/	[h]	initially and medially
NASALS :		
/m/	[m]	all the positions
/n/	[n]	all the positions, ([-n] ~ [-l])
/ŋ/	[ŋ]	all the positions
LATERAL :		
/l/	[l]	all the positions [-l] ~ [-n] [-l-] ~ [-r-] as stated earlier,
TRILL :		
/r/	[r]	all the positions
	[ɽ]	medially ([ɽ] ~ [r])
SEMI-VOWELS :		
/w/	[w]	initially and intervocalically
	[u̯]	elsewhere
/y/	/y/	initially and intervocalically
	/i̯/	elsewhere

The *Matrices* of the *phonemics* of Manipuri language are as follows :

Table No 1 TONES

Phoneme	*Nature*	*Representation*
/`/	Falling	
/·/	Rising	
/–/	Level	Left unmarked

Table No. 2 **VOWELS**

Height of tongue ↓	*Position of tongue*					
	Front		*Centralised*		*Back*	
	Unrounded		Unrounded		Rounded	
	Short	Long	Short	Long	Short	Long
HIGH	i	i:			u	u:
LOWER HIGH						
HIGHER MID		e:				o:
MID						
LOWER MID						
HIGHER LOW			a	a:		
LOW						

Table No. 3 **CONSONANTS**

Point of articulation →		*Labial*	*Apical*	*Frontal*	*Dorsal*	*Faucal*
↓ *Manner of articulation*		Bilabial	Alveolar	Mediopalatal	Mediovelar	Pharyngal
STOPS	Voiceless unaspirated	p	t		k	
	Voiceless aspirated	p^h	t^h		k^h	
	Voiced unaspirated	b	d		g	
	Voiced aspirated	b^h	d^h		g^h	
AFFRICATES	Voiceless unaspirated			c		
	Voiceless aspirated			c^h		
	Voiced unaspirated			j		
	Voiced aspirated			j^h		
SPIRANTS	**Voiceless**		s	ś		h
	Voiced					
NASALS	Voiced	m	n		ŋ	
LATERAL	Voiced		l			
TRILL	Voiced		r			
SEMI-VOWELS	Voiceless					
	Voiced	w		y		

SCRIPT :

The original MANIPURI SCRIPT an offshoot of *Brahami* has been replaced long back by another script derived from *Brahami* khown as *Bengali*. Since then it has been modified at times and is in current use. This script is written from left to right. No serious attempt has been made to systematically modify the current script as a whole to suit the nature of the Manipuri language. Manipuri Longi Banan, published by Naharol Sahitya Premi Samiti, Imphal, 1967 is such an attempt, but still discripencies remain. Some enthusiastic young people are now talking of reviving the old script. But mere reviving of the old script will not serve any useful purpose until it accounts for the representation of tones etc. An attempt to revive the old script will be in the long run harmful to the propagation and development of the language for various apparent socio-economical reasons. Moreover the current script has the potentiality to account for all the necessities if modified. In this regard[1] an attempt is made here to suggest minimum ways and means from within the system to achieve maximum efficiency in the visual (alphabetic) representation of Manipuri language. This system operates on *linear fashion* and is a *one tier system* thus avoiding further super or sub-imposition. This system is suitable when judged on the principles of *clarity, legibility and capacity for both manual and mechanical manipulations*. It requires minimum or no changes in the existing typing machines with the least extra effort on the part of the typists and has a potentiality for *social acceptance* since the modifications are from within the existing system.

Manipuri language has to represent thirtysix sounds excluding the level tone which is to be left unmarked, but the letters or *graphemes* in use are more than those needed for their representation. The superfluous letters, some of the *allographs* and other inconsistancies in the existing system could be safely omitted. Thus necessary omission will not only ease the load but also provide for better and a fuller representation.

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[1] *Introduction to Manipuri Script* (forthcoming), CIIL, Mysore.

See also **Inder Singh** : 'Representation of Suprasegmentals in Writing Systems', presented at the *3rd All India Linguists Conference* held at the Osmania University, Hyderabad, during December, 1972.

ঋ [ri] ৠ [ri:], অং [aŋ], অঃ [ah]

ঙ [ŋ], ট [ʈ], ঠ [ʈʰ] ড [ɖ],

ঢ [ɖʰ], ণ [ɳ], ষ [ʂ], and ঁ [ⁿ]

are not needed at all for obvious reasons that the sonnds these graphemes are supposed to represent either do not exist or are not distinctive.

Sounds like [ai̯], [au̯], [a:i̯], [a:u̯], [e:i̯], [o:i̯], [o:u̯] and [ui̯] should be represented by unit graphemes such as

অই, অউ, আই, আউ, এই ওই,

ওউ, and উই respectively. These graphemes will not have any allographs. In traditional orthography, [ai̯] and [au̯] are optionally represented as ঐ and ঔ along with their allographs as ৈ and ৌ These representations should be regularized as suggested above.

The retention of ই and উ as the second element of the units instead of the য়্ and ৱ্ is justified on the basis of economy and legibility.

All consonantal representations will have inherent অ and to denote the pure consonant forms [্] may be used below the consonants. ং , ৎ , ঽ and other combined forms which are already prevalent, may be retained even though forms with [্] could be used.

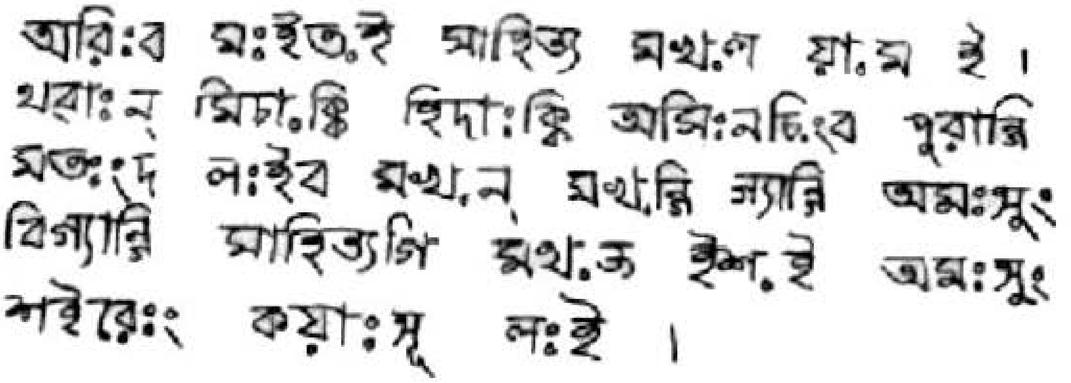
The level tone may be left unmarked, and for representing falling and rising tones [$_{o}$] and [$^{o}_{o}$] may be used after the graphemes representing vowel, sounds.

Given below is a passage both in the current orthography as well as in the suggested modified script so as to illustrate the advantages claimed above. The phonetic notations and the meanings are given subsequently.

CURRENT SCRIPT :

অরিবা মৈতৈ সাহিত্য মখল য়াম হৈ ।
থৱান মিচক্কী হিদাক্কী অমিনচিংবা পুরাণগী
মতংদা লৈবা মখল মখলগী শাস্ত্রগী অমসুং
বিজ্ঞানগী সাহিত্যগী মথক্ত হৈটৈশ অমসুং
শৈরেং কয়াসু লৈ

SUGGESTED MODIFIED SCRIPT:



It reads as follows in the phonetic transcription.

aríba má j̨tè:j̨ sa:hitya makʰàl yà:m i
tʰawá:n micà:kki hidá:kki asínacìŋba pura:ngi
mawó:ŋda lá j̨ba makʰàn makʰàngi gya:ngi am:ášuŋ
bigya:ngi sa:hityagi matʰàkta išàj̨ amášuŋ
šaj̨ré:ŋ kayá:šu: láj̨

'There are various types of literature in early Manipuri. Subjective songs or lyrics and objective romances or narrative poems besides what may be called the germs of a literature in the shape of chronicles and treatises on astrology, medicine, etc., are all there'.

4. PHONETIC DRILLS

When a student sets out to learn a new language, he needs to accept the fact that it is different and that he must learn to pronounce some new and unfamiliar sounds properly. However, he is so conditioned by the sound system of his native language that learning of these new sounds can be a very formidable task. He also finds it almost equally hard to pronounce the familiar sounds when they are used in unfamiliar ways.

The key to success lies in the encouragement by the instructor and the amount of practice given for the pronunciation of these sounds through drills etc.

The *Phonetic Drills* are given here to help the learner to practice the pronunciation of the sounds described in chapter two. An attempt is made to provide *minimal* and *subminimal pairs* wherever available. The examples are presented in phonetic script in the chapter without using [ ].

The examples given under the description of each sound in chapter two can also be used for additional drills.

TONES :

One of the major areas of difficulty for the learners whose native language does not have tone, or when they do not have an experience of preceiving or pronouncing tones is of acquiring the habit of making distinctions in the perception and production of various tones and their patterns.

Words in Manipuri language are of *mono-morphemic* and *polymorphemic* nature. **Monomorphemic** words are *monosyllabic* and *disyllabic* words and the **Polymorphemic** words are *monosyllabic*, *dissyllabic* and *polysyllabic* words. Tone is a syllabic feature where the only obligatory segment of the syllable occurring as the nucleus is a vowel. *Borrowed items* have a pattern of level tone on each syllable. Patterns available in monomorphemic words determine the tonal patterns in polymorphemicwords. These patterns are as follows :

Monosyllabic words have either a *falling*, a *rising* or a *level* tone.

FALLING TONE :

i̍:	'blood'
tʰo̍:ŋ	'door'
kʰo̍:ŋ	'leg'
cà:k	'food'
šiŋ	'fuel'

RISING TONE :

kí:	'fear'
tʰɑ́:ŋ	'bridge'
kʰó:ŋ	'canal'
cá:	'tea'
cíŋ	'hill'

LEVEL TONE :

i	'thatch'
u:t	'camel'
kʰo:m	'breast, milk'

ca:	'lac'
šiŋ	'ginger'

Words for further practice

ùt	'ash'
tìn	'insect'
màŋ	'dream'
làn	'property'
p^hàm	'rank'
kà:ŋ	'mosquito'
hìk	'louse'
hàŋ	'ankle'
mìt	'eye'

ó:t	'block'
míŋ	'name'
mó:n	'pillow'
ló:n	'language'
p^há:m	'stool'
ká:ŋ	'chariot'
cé:k	'brick'
lá:ŋ	'trap'
p^hí	'cloth'

u:t	'camel'
tin	'spitton'
mo:n	'mound'
lo:ŋ	'clove'
p^ho:n	'result'
ta:m	'rhythm'
ce:k	'cheque'
hiŋ	'asafoetida'
p^hi	'fee'

Disyllabic words have *falling-level*, *rising-level*, *level-level*, *level-falling*, *level-rising* and *rising-falling* patterns.

FALLING–LEVEL

nʌ̀kpa	'proximate'
cúmna	'truly'
kʰúba:m	'paw
ké:kru	'soapnut'
kʰúdam	'evidence'

RISING–LEVEL

nʌ́:kan	'side'
ú:ba	'to see, scene'
kʰʌ́:me:n	'brinjal'
kʰó:ḷru	'wax'
cʌ́:diŋ	'consumption'

LEVEL–LEVEL

a:ca:r	'pickle'
uccʰo:p	'feast, festival'
kʰacar	'mule'
íšo:r	'God'
karba:r	'business'

Words for further practice

cúbli	'bridle'
nʌ̀ŋgi	'your'
ŋʌ̀ksam	'neck'
ŋʌ̀ŋba	'to roar, roaring'
kʰújin	'nail'
cʌ̀tpa	'to go, gait'
kʌ̀kpa	'to offer, offering'
tʰʌ̀u̯ba	'to drive' driving'
ʌ́i̯ba	'to nap, nap'
ní:ba	'to ask, begging'
nʌ́:ḷba	'to wait, wait'
kʰʌ́nba	'to open, open'

kʰè:tpa	'to cut, cutting'
kʰé:ba	'to amuse, amusement'
táu̯ba	'to do, work'
tʰáu̯ba	'to be sharp, sharp'

a:sa:	'hope'
a:no:k	'spectacles'
injin	'engine'
ta:da	'elder brother'
kʰe:jur	'dates, sweat'
kʰara	'a little'
ta:ra:	'wire'
tʰau̯ri	'rope'

LEVEL-FALLING

ahàn	'elder'
ahàm	'three'
icàn	'younger sister'
išàŋ	'moss'
kʰudùp	'cubit'

LEVEL-RISING

adó:m	'you (hon.)'
amó:m	'female'
i:cé:n	'flow'
išé:n	'younger sisters's husband'
kʰudé:ŋ	'wooden tub'

Words for further practice

kuwà:k	'crow'
ità:u̯	'male friend'
imà:	'mother'
išìŋ	'water'
tarùk	'six'
amùk	'once'

arúm	'fever'
asák	'so much'
awáːŋ	'north'
itáː	'female friend'
ipáː	'father'
adúm	'like that'
taréːt	'seven'
amáː	'one'
marú	'seed'
madú	'that'

RISING–FALLING

ámàŋ	'woods'
árìk	'beads'
náːkòːn	'ear'
cáːŋcàt	'rate'
kʰúŋàŋ	'village'

Words for further practice

náːkòːn	'ear'
útùp	'log'
úkàp	'wood powder'
lámcàt	'behaviour'
kʰóːi̯dòːu̯	'navel'
kóːntʰòːŋ	'gate'
cái̯rùŋ	'jaw'
kʰóːi̯jèːi̯	'fishing rod'

Trisyllabic words have *falling–level–level*, *rising–level–level*, *level–level–level* ; *level–falling–level*, *level–rising–level* and *rising–falling–level* as some of the most frequent patterns.

FALLING–LEVEL–LEVEL

ánnaba	'to meet, meeting'

cà:nnabi	'custom'
cù:mdaba	'to do injustice, injustice'
tʰà:jaba	'to be faithful, faithful'
kʰànnaba	'to quarrel, quarrel'

RISING–LEVEL–LEVEL

ó:tna:i̯ba ~ ó:nna:i̯ba	'to be violent, violent'
cá:nnaba	'to be intimate, intimate'
cíŋnaba	'to be in doubt, doubt'
tʰá:jaba	'to believe, belief'
pé:ndaba	'to be unsatisfactory'

LEVEL–LEVEL–LEVEL

atitʰi	'guest'
racana:	'essay'
kʰarana	'partly'
re:nga:ri	'train'
e:siya:	'Asia'

Words for further practice

nò:knaha	'to ridicule, ridiculous'
pìjaba	'to serve, service'
pʰàttaba	'to be bad, bad'
mà:nnaba	'to be equal, equal, like'
sà:nnaba	'to play, playing'
kʰá:i̯naba	'to share, sharing'
cá:nbiba	'to favour, favour'
pʰájaba	'to be good, good'
tó:ŋjaba	'to gain, gain'
tó:ŋa:nna	'diversly'
pritʰibi	'earth'
indriya	'organs'
bya:kro:ngi	'grammatical'

a:sa:mi	'Assamese'
a:ra:mda:r	'plane'

LEVEL–FALLING–LEVEL

akànba	'to be hard, hard'
apìkpa	'to be small, small'
apàŋba	'to be foolish, foolishness'
arìkpa	'to be miser, miserly'
asàŋba	'to be green, green'

LEVEL–RISING–LEVEL

akí:ba	'to be afraid, terrible'
apá:kpa	'to be wide, width'
apé:nba	'to satisfy, satisfactory'
ará:ppa	'to be distant, distant'
asá:ŋba	'to be long, length'

Words for further practice

a:hà:ŋba	'to be free, leisure'
ahà:ŋba	'to be spacious, space'
karàmba	'which'
asò:nba	'to be weak, weak'
ahìppa	'to be lying, lying'
a:há:ŋba	'to be empty, empty'
a:há:nba	'to be first, first'
kaná:gi	'whose'
ahú:ba	'to steal, stolen'
ahé:nba	'to be in excess,excess'

RISING–FALLING–LEVEL

kálàkpa	'to be envious of, envy'
kʰá:jìnba	'to prepare, preparation'
tʰíjìnba	'to probe, probing'

kó:nsìnba	'to fold, fold'
cé:ksìnba	'to take care, care'

Words for further practice

ló:nsìnba	'to lock, lock'
há:ŋdò:kpa	'to open, open'
máŋsìtki	'airy'
hé:ngàtpa	'to increase, increase'
tʰáu̯ jìnba	'to be brave'

VOWELS

[i] vs. [i:]

ipá:	'father'
í:ba	'to write, writing'
tʰíŋba	'to forbid, forbiding'
tʰí:ba	'to be ugly, ugly'
ki	'of'
kí:	'fear'

Words for further practice

ìnba	'to follow, follower'
ì:nba	'to be cold, cold'
itá:	'female friend'
i:tó:n	'dysentry'
irá:n	'my fault'
i:rá:ŋ	'agitation'
iyá:	'my teeth'
i:yá:	'bank'
gi	'of'
gʰi:	'melted butter'
ti	'testicles'
kí:	'fear'
cahí	'age'
así:	'this'

[i:] vs. [e:]

í:ba	'to write, writing'
e:ka:	'ace'
ní:ba	'to ask, begging'
né:mba	'to be low, low'
así:	'this'
icé:	'elder sister'

Words for further practice

pí:ba	'to offer, offerings'
pé:nba	'to satisfy, satisfactory'
t^hí:ba	'to be ugly, ugly'
t^hé:ba:	'rabbit'
ší:ba	'to die, death'
šé:nba	'to protect, protection'
kí:ba	'to fear, fear'
ké:nba	'to fall, falling'
aní:	'two'
iné:	'aunt'

[i] vs. [y]

í:mba	'to push, pushing'
yá:nba	'to cut, cutting'
ipá:	father'
yá:ba	'to approve, approval'
it^{h}ín	'feeling'
yá:t^{h}àŋ	'order'
išíŋ	'water'
yá:sínba	'to agree, agreement'
iré:n	'deep water'
yá:re:n	'tooth'

[u] vs. [u:]

út	'ash'
u:t	'camel'
kʰút	'hand'
kʰu:r	'razor'
hú	'poison'
tú:	'canal'

Words for further practice

usá:	'branch'
ú:ba	'to see, scene'
tûmba	'to sleep, sleep'
tú:ba	'to sew, sewing'
tʰúŋba	'to reach, arrival'
tʰú:ba	'to be fast, fast'
tʰé:ngu	'wooden hammer'
tʰé:ŋu:	'tortoise'
nipʰú	'forty'
po:pú:	'yoke'

[u:] vs. [o:]

ú:ba	'to see, scene'
ó:ba	'to vomit, vomiting'
tú:ba	'to sew, sewing'
tó:ŋba	'to ride, riding'
tʰé:ŋu:	'tortoise'
tʰaró:	'lily'

Words for further practice

u:t	'camel'
o:t	'block'
ú:daba	'to disappear, disappearance'

ó:tpa	'to stir, stirring'
kʰu:r	'razor'
kʰó:ŋ	'canal'
šu:r	'tune'
íšo:r	'God'
lú:	'bamboo net'
tó:	'particle of address'

[u] vs. [w]

úri	'creeper'
wá:ri	'prose, story'
úrik	'beads'
wá:ré:p	'decision'
úpʰàn	'dust'
wá:pʰàm	'problem'
úmàŋ	'woods'
wá:hàŋ	'question'
uná:	'leaf'
wa:ná:	'bamboo–leaf'

[a] vs. [a:]

ahiŋ	'night'
a:pʰiŋ	'opium'
kʰànba	'to please, pleasure'
kʰá:ŋba	'to hear, hearing'
na	'by'
ŋà:	'fish'

Words for further practice

adó:m	'you' (hon)
a:no:k	'spectacles'
ayúk	'morning'
a:yin	'law'

ŋàŋba	'to roar, roaring'
ŋá:nba	'to shine, shining'
tìkpa	'to grate, grating'
tá:kpa	'instruct, instruction'
taré:t	'seven'
ta:rik	'date, day'

CONSONANTS

[p] vs. [b]

pá:ba	'to read, study'
ba:bu	'gentleman'
ipì:	'father'
í:ba	'to write, writing'
pa:p	'sin'
b^ha:b	'idea'

Words for further practice

para:	'lesson'
bo:ra:	'sack'
pa:li	'turn'
ba:si	'nationality'
càtpa	'to go, gait'
cànba	'to contain, list'
kàtpa	'to offer, offerings'
kìnba	'to be hard, hard'
nìp	'snot'
to:lo:b	'remuneration'
sa:p	'curse'
naba:b	'ruler'

[p] vs. [p^h]

pí:ba	'to offer, offerings'

p^{h}á:ba	'to beat, beating'
ipàn	'father's elder brother'
ùp^{h}ùn	'dust'

Words for further practice

pùmba	'to collect, entire'
p^{h}ùmba	'to bury, burried'
pišùm	'eyebrow'
p^{h}íjò:n	'dress'
ùpà:k	'board'
ip^{h}àt	'fountain'
ùpù	'box'
cap^{h}ù	'cooking pot'
tupi	'hat'
po:mp^{h}í	'rage'

[p] vs. [m]

pá:t	'lake'
ma:	'bed bug'
ipá:	'father'
imà:	'mother'
to:p	'gun'
bo:m	'bomb'

Words for further practice

para:	'lesson'
marú	'seed'
puja:	'worship'
mo:ja:	'glove'
pó:kpa	'to give birth, birth'
mó:tpa	'to be dirty, dirty'
nupí:	'lady, female'

mamí:	'image'
mapù	'master, owner'
mamù:	'sting'
ká:p	'span'
ba:m	'balm'

[b] vs. [bʰ]

bakta:	'orator'
bʰakta	'devotee'
bo:ra	'sack'
bʰara:	'rent'
ba:rniš	'varnish'
bʰaro:t	'India'
karba:r	'business'
gumbʰi:r	'crocodile'
kabò:	'Burmese'
sabʰa:	'council'

[pʰ] vs. [bʰ]

pʰá:ba	'to catch, catch'
bʰa:b	'idea'
pʰo:n	'result'
bo:m	'bomb'
ša:pʰù:	'Gemini'
sabʰa:	'council'
ka:pʰi	'coffee'
gumbʰi:r	'crocodile'

[b] vs. [w]

baná:n	'spelling'
wá:hàŋ	'question'
ba:si	'nationality'
wá:ri	'prose, story'

í:ba	'to write, writing'
iwá:	'husband'
ibúŋ	'sir'
awá:ŋ	'north'

[t] vs. [d]

tarúk	'six'
damak	'for'
matú:	'fur'
madú	'that'
pá:t	'lake'
band	'embarkment'

Words for further practice

turé:n	'canal'
duka:n	'shop'
tá:ki	'gonorrhoea'
da:ku	'dacoit'
tó:nna	'lowly'
do:na	'leaf cup'
jata:	'matted hair'
ta:da:	'elder brother'
matàm	'time'
adúm	'like that'
mató:n	'tip'
adó:m	'you' (hon.)

[t] vs. [tʰ]

tará:	'ten'
tʰaró:	'lily'
matàm	'time'
matʰàŋ	'next'

Words for further practice

tàkpa	'to grate, grating'
tʰàkpa	'to drink, drink'
tá:ba	'to fall, fallen object'
tʰá:ba	'to plant, planted object'
tà:ba	'to hear, hearing'
tʰà:ba	'to send, sending'
mató:n	'top'
matʰó:ŋ	'story'
ità:u̯	'male friend'
itʰà:u̯	'right'

[t] vs. [n]

tàn	'bread'
nàŋ	'you'
matàm	'time'
manàm	'smell'
mìt	'eye'
làn	'property'

Words for further practice

tìn	'insect'
nipá:	'male, man'
tìnbi	'mother–worm'
nìnba	'to try, trial'
tùŋ	'back, rear'
nùŋ	'inside'
ta:mu	'a Burmese town on the border'
namú	'mankind'
kʰàt	'hand'
kùn	'twenty'
pá:t	'lake'
pá:n	'out'

[d] vs. [dʰ]

drama:	'drama'
dʰarma	'religion'
dram	'drum'
dʰa:ra:	'issue'
dá:ku	'dacoit'
dʰa:tu	'metal'
do:ri	'pully'
dʰo:lo:k	'big drum'
gada:	'mace'
gadʰa:	'donkey'

[tʰ] vs. [dʰ]

tʰùba	'to make haste'
dʰruba	'pole star'
tʰùm	'salt'
dʰup	incense'
tʰáṷba	'to be brave, brave'
dʰo:bi	'washerman'
tʰàṷba	'to drive, driving'
dʰumake:tu	'comet'
tʰá:ŋba	'to carry, lift'
dʰamka:	'threat'

[k] vs. [g]

kó:mla:	'orange'
gamla:	'flower pot'
ùkùp	'wood powder'
cagá:	'income'
cà:k	'food'
ra:g	'raga'

Words for further practice

kó:m	'pit'

go:m	'gum'
kè:kru	'soap nut'
ge:hu	'wheat,
kàn	'twenty'
gun	'quality'
lìkli	'bottle'
ligla:	'dew'
da:ku	'dacoit'
magùn	'quality'
co:k	'chalk'
jug	'era'

[k] vs. [kʰ]

ká:ŋ	'chariot'
kʰó:ŋ	'canal'
tàkpa	'to grate, grating'
akʰàkpa	'to climb, climbing'

Words for further practice

kà:ŋ	'mosquito'
kʰò:ŋ	'leg'
kó:m	'pit'
kʰo:m	'breast, milk'
pó:kpʰàm	'birth place'
pá:kʰra:	'widower'
ná:kàn	'side'
pá:kʰàŋ	'youth'

[k] vs. [ŋ]

ka:	'room'
ŋà:	'fish'
tàkpa	'to grate, grating'
nàkpa	'to be amazed, amazement'

pùk	'belley'
púŋ	'hour'

Words for further practice

ka:ró:ŋ	'crook'
ŋará:ŋ	'yesterday'
kámba	'to decay, decaying'
ŋàmba	'to succeed, success'
tá:kpa	'to teach, teaching'
tá:ŋna	'rarely'
tó:k	'spade'
tó:ŋ	'muscle'
kó:k	'head'
kʰó:ŋ	'canal'

[g] vs. [gʰ]

guli	'tablet'
gʰumti	'canopy'
guʰa:	'well'
gʰus	'bribe'
cagá:	'income'
magʰa:	'leonis star'
cugùm	'residence'
singʰa:ra:	'pie'

[kʰ] vs. [gʰ]

kʰá:	'south'
gʰi:	'refined butter'
kʰùt	'hand'
gʰus	'bribe'
pá:kʰàŋ	'youth, bachelor'
da:ggʰar	'post office'
makʰá:	'mouth'
magʰa:	'leonis star'

[c] vs. [j]

cúm	'lizard'
jug	'era'
icé:	'elder sister'
o:ja:	'teacher'

Words for further practice

cagá:	'income'
jagó:i̯	'dance'
cà:k	'food'
ja:m	'black plum'
macàn	'material'
pʰíjò:n	'dress'
ucé:k	'bird'
kʰùje:n	'armlet'

[c] vs. [cʰ]

cínba	'to wear, wearing'
cʰinba	'to be sour, sour'
cura:	'crown'
cʰuri	'knife'
cana:n	'oat'
cʰa:na:	'stainer'
úcùp	'peg'
uccʰo:p	'feast, festival'

[j] vs. [jʰ]

ja:m	'black plum'
jʰa:n	'cymbal'
ja:ti	'race, nation'
jʰa:ri	'a drinking pot'
juwa:r	'gambling'
jʰula:n	'a festival'

o:ja:	'teacher'
o:jʰa:	'teacher'

[s] vs, [š]

se:r	'seer'
šé:n	'money'
a;sa:	'hope'
ušá:	'branch'
pa:s	'pass'
ta:š	'playing cards'

Words for further practice

sana:	'gold'
šá:	'animal'
se:ndal	'slippers'
ša:pʰà:	'Gemini'
así:	'this'
išìŋ	'water'
asúk	'so much'
išàŋ	'moss'
gʰus	'bribe'
ko:š	'dictionary'
sarkas	'circus'
a:ka:š	'sky'

[c] vs. [š]

cé:k	'brick'
šé:n	'money'
cíŋ	'hill'
šìŋ	'fuel'
icé:n	'flow'
išìŋ	'water'
icàn	'younger sister'
išàŋ	'moss'

pukeé:l	'mind'
pišùm	'eyebrow'

[h] vs. [pʰ] [tʰ] [kʰ] [cʰ] [s]

hí	'boat'
pʰí	'cloth'
hú:	'poison'
tʰú:	'vagina'
há:	'yam'
kʰá:	'south'
hagtʰí:	'sneeze'
cʰutí	'leave'
há:kùm	'last year'
sa:pʰú:	'Gemini'
cahí	'age'
kopʰi	'coffee'
ahúm	'three'
atʰùba	'to be quick, quick'
ahàn	'elder'
makʰàn	'kind, type'
uhái̯	'fruit'
uccʰo:p	'feast, festival'
graha	'planet'
a:sa:	'hope'

[m] vs. [n]

màŋ	'dream'
nàŋ	'you'
mamí:	'image'
caní:	'two hundred'
manàm	'smell'
mamàn	'rent'

Words for further practice

ma:	'bed bug'

na	'at, by'
miŋt^{h}ò:n	'title'
niŋdó:n	'breast'
amá:	'one'
kaná:	'who'
imà:	'mother'
iná:	'a piece of thatch'
inàm	'my back'
icàn	'younger sister'
kó:m	'pit'
ló:n	'language'

[n] vs. [ŋ]

namú	'mankind'
ŋà:nu	'duck'
kànba	'to save, saving'
k^{h}àŋba	'to know, knowledge'
làn	'property'
làŋ	'thread'

Words for further practice

ná:kàn	'side
ŋa:càk	'tadpole'
ná:càn	'centipede'
ŋa:càŋ	'trapful of fish'
t^{h}ínba	'to stab, colic-pain'
t^{h}íŋba	'to shut, close'
tànba	'to halt, halt'
tàŋba	'to scratch, scar'
ta:n	'tune'
kà:ŋ	'mosquito'
pùn	'pitcher'
pùŋ	'hour'

[l] vs. [r]

lá:ŋ	'trap'
ra:g	'raga'
kalá:k	'knee pit'
kurá:k	'butterfly'
šil	'craft'
šu:r	'tune'

Words for further practice

ligla:	'dew'
riksa:	'rikshaw'
lúsàm	'lock of hair'
ruma:n	'handkerchief'
a:lu	'potato'
a:ra:m	'common'
ulum	'pendulum'
úrùk	'tray'
cana:l	'oat'
cina:r	'musk melon'

[w] vs. [y]

wá:	'bamboo'
yá:	'tooth'
wá:ri	'prose, story'
yá:ri	'gum'
wá:ba	'to worry, worry'
yá:ba	'to agree, agreement'
wá:hàŋ	'question'
yá:pàŋ	'grinding tooth'
mawún	'hide'
mayúŋ	'length'

Drills given in this chapter are merely illustrative Instructors and language teachers of Manipuri (being native speakers of Manipuri and having pedagogical training) surely can develop additional material as required.

The teachers as well as students may however keep the following points in view while making use of this Phonetic Reader.

(i) The native speaker is always correct, hence imitate him.

(ii) Mimic the teacher while keeping your eyes on him. Mimic him to the point of gesture, speech being culturally conditioned, gesture many a times plays an important role in communication.

(iii) Do not correct each other in the class and avoid any other language medium while learning the language.

(iv) Never repeat after your fellow students. Always follow the instructor or the tape as the case may be.

(v) Remember always that memorisation is neither a drudgery nor an inefficiency but very vital for language learning.

(vi) Do not resent if-corrected.

(vii) Remember that it is only by actually speaking the language you can learn how to speak. No amount of knowledge about the language will give you facility in speaking.

The instructors may note the following points during their classroom teaching.

(i) Do not make a student repeat more than three times at a stretch. If not satisfied with him come back to him again.

(ii) Never mimic the students' mispronunciation. Always speak without exaggerating or ridiculing the student for his mistake.

(iii) Avoid other language media while teaching the language in question.

(iv) Keeping eyes on the student repeat afresh for every student.

(v) Repeat as often as necessary and pause whenever it is natural and helpful.

(vi) Never slow down from your natural speed. Never make unnatural pauses.

(vii) Never be partial. Do not neglect the better ones to concentrate on the poorer ones or do not concentrate on the better ones because it is easy to teach them.

(viii) Stick to the vocabulary range of the students at any given time. It is important that the students should be able to employ the learnt vocabulary items and learnt structures in communicating in an unanticipated context.

(ix) Try to hold the attention of the class; no amount of advice is going to make a good teacher of you. It is your personal contact and communion with the student that counts in making the class lively.

(x) Try to remove the element of drudgery from the classroom teaching, but remember that your business is to teach and not just to humour the class

(xi) Do not get the class taking about the language, or go on tangents to some other topics.

(xii) Finally, remember that the presentation of some such points here is a strategy and not the goal.

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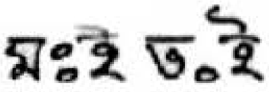
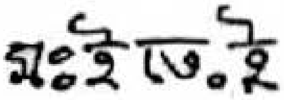
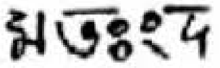
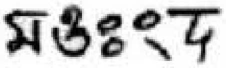
ERRATA

Page	*Incorrect*	*Correct*
v	tegether	together
vii	a	—
7	[e]	[e:]
11	airculatory	articulatory
16	[imà:]	[mìt]
	[ice:]	[icé:]
22	nátte:	nàtte:
24	óba	ò:ba
25	thó:ŋ	tʰó:ŋ
	thò:ŋ	tʰò:ŋ
26	kàŋ	kà:ŋ
28	cápmà:nnala	cápma:nnaba
32	thó:ŋ	tʰó:ŋ
35	khùṭ ~ khùt	kʰùṭ ~ kʰùt
42	phíjò:n	pʰìjò:n
44	derka:s	darkʰa:s
45	MAAIPURI	MANIPURI]
46	HONETIC	PHONETIC
51	[-ŋn-n]	[-ŋn-]
52	jha:l	jʰa:l
62	inasmuch	in as much

64	Nil	—
69	khown	known
72		
73		
74	monosyllabic	—
87	:m	ba:m
97	rds	words
104	pike, L	pike, K.L.